

THE YOUTH'S COMPANION

HUNDREDTH YEAR

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Bicycle Polo on Long Island, N. Y. See page 332.

Photograph by Edwin Levick

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Miscellany

A MOTHER WHO LOVED STARS

By Jeannie Pendleton Hall

*The other mothers knew the usual things:
To kiss a bruise; to meet a small girl's need
When she came hungry; mend with magic speed
A frock, that she might fly as if on wings*

*Back to her playing comrades. But my own
Knew something these had missed. She loved
the stars—
Could tell of mighty Jupiter and Mars;
Blue Vega with the zenith for a throne.*

*And when I vanquished some dull lesson book,
Or when my little cloth had polished bright
The dusty chairs, she chose a starlit night
And led me with her for a glorious look.*

*It was in winter that those stars burned through
Most grandly, as we stood—my mother's cloak
Wrapped round us both—and whispered
when we spoke,
Keeping our splendid secret, just we two.*

*She did not call them "suns" or "worlds" to me;
She pointed simple shapes: the Belt, the Bear,
The Seven that lost a sister from their care,
The stately Twins and all their company.*

*I feel her clasp me as she used to do,
Though now she knows where planet-trails begin
And where they end, but may not let me in
To share the shining knowledge, just we two.*

*They stand above me: Sirius, Venus, Mars,
And if I blunder, conning name and place,
I see no censure in my mother's face,
For she had patience—and she walks with stars.*

THE WAKEFUL CHILD

SLEEP is as essential to the young child as food or water, and the healthy child will help himself to it. Up to the age of six months or so the baby should sleep from eighteen to twenty hours a day. Then the time for sleep gradually shortens. When from one to three years old the child ought to sleep about half the time; from three to six years he should sleep ten or eleven hours a day, and after six years nine or ten hours. If the child does not get this amount of sleep, it is generally because there is something wrong with the child or its surroundings. The bed may be at fault; there may be lumps in the mattress or too much or too little bedclothing. Perhaps the night garment has thick or scratchy seams. The room may be too stuffy, for the child needs plenty of fresh air at night.

The food may be wrong. The child's evening meal should be light, not wholly liquid, and it should contain no stimulating food, no eggs, no meat or meat broths, and no gas-forming foods, such as beans. Whole

wheat or graham bread or crackers, with butter, and a little honey or apple sauce or a few stewed prunes, with one glass of water or milk, will suffice for any child up to eight or ten years old.

Do not let a child get into a mood of excitement near bedtime; do not let it hear or read exciting stories, especially ghost stories; and if it plays any games between supper and bedtime, they should be quiet ones. A child who fears the dark should have a faint light in his room or reflected into it. The fear can be overcome by reasoning and argument when the child is older.

During the day a child should live much in the open air, and the noonday nap should be gradually shortened and then given up. If sleeplessness, after reasonable care, still persists, the state of the health must be carefully gone into. Particular attention should be paid to the bowels and digestion, for the cause is very often to be found there. Then the eyes should be examined, for even in a child too young to read astigmatism may be upsetting the delicate nervous balance. Look at the mouth to see that there is no impediment to the orderly eruption of the teeth and that there are no ulcerations on the gums or the tongue. Chronic ear trouble may cause pain or ear noises that disturb sleep. A beginning spine or hip disease may interrupt sleep with a dart of pain. If there is no disease present, sleep usually follows a warm bath just before going to bed. Never give a sleeping potion, however mild, except by advice of the physician.

NICE LITTLE JAPANESE CHILDREN

JAPANESE children seem totally to lack the instinct for destruction that is a marked characteristic of American youth. In the bay of Yokohama, says Dorothy Dix in "My Trip Around the World," there is some sort of a little pink barnacle, about the size of a silver dime, that fastens itself on anything cast into the water. The Japanese put in little twigs and sticks, and when these have become covered with the pinkish shells they mat them together between bamboo poles and make of them a fence that looks like a wall of mother-of-pearl. It is the most beautiful, the most ethereal, the frailest structure that it is possible to imagine, and yet you see blocks and blocks of this fence along a public highway, on which thousands of little boys pass and play every day.

And it isn't touched. Get that? A small boy and a mother-of-pearl fence, existing at one and the same time and in the same place! I regard that as the chiefest of all the marvels of Japan. I reflected that such a fence would last about three minutes in America but, being of an optimistic nature, I probably exaggerated the time limit.

Japanese children are the soul of courtesy. Wherever you meet a group of them they stop still and throw up their skinny little arms above their heads and shout out: "Banzai! O enjinsan!" which means, "Hurrah, honorable stranger, may you live ten thousand years." And sometimes they begin reciting the alphabet, and call after you a, b, c, d, e, f, to show that they are studying English, for English is taught in all the Japanese schools.

Japanese children never cry. They never howl, or fight, or make any of the nerve-racking noises that cause everyone who has to live with American children to pray for deafness. What a pity we cannot give the Japanese our religious ideas and scientific education and receive in exchange their ideas of politeness and the management of children!

HE KEPT THE RAIN OFF

MANY a farmer who has had to stand by while drought parched his laborious crops will appreciate the solicitude of the Texas agriculturist of whom The Argonaut tells us:

A farmhand from Minnesota went to work for a Texas farmer. There had been a prolonged drought, and everyone on the farm was praying for rain. One day a few drops of rain began to fall, and all were delighted, hoping for a real shower. The farmhand showed his joy by dancing about in the light fall, much to the annoyance of the farmer.

"Come in out of that rain, you jackass," he cried.

"Shucks, I don't mind a few drops of rain," called back the man.

"Who said anything about you?" shouted the farmer. "We want every bit of that rain to fall on Texas."

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THE YOUTH'S COMPANION

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Banditos do Brazil

By ALBERT BAILEY

Illustrated by RODNEY THOMSON

IT was in July—midwinter below the equator. The jingle of an American alarm clock rang out across the shack through the chill of the South Brazilian dawn. Pine boards creaked under young Jim and Leonard Bradley, lumbermen, as they yawned and stretched.

Leonard sprang up from his bunk and groped his way to the door.

He lit the lantern and began to pull on his rough clothing. Lean, wiry and dark was Leonard, and quick in thought and movement. He had graduated at Harvard, had seen action in France and now, at twenty-six, was struggling for the third year to gain a financial foothold in the interior of Brazil.

A half-year before, when Leonard's brother Jim, the younger by eight years, had awakened to his first morning in the Brazilian backwoods, he had snatched two revolvers from under his blankets and poked about the corners of the shack in search of Indians and anacondas. Today he rolled out of bed with an impolite remark concerning the alarm clock.

In a few minutes the two stepped out into the corral adjoining the shack and captured and bridled little Dona Rosa. Leonard heaved his heavy stock saddle up on the mule's back. "Wish I didn't have to go ox-buying," he said. "Hate to go off and leave you alone at camp during this revolution business. Now that all the soldiers have been sent to São Paulo to fight, the 'banditos' and thugs round here can raise Cain."

"But they won't," Jim replied. "They're all cowards and half dead."

Leonard tugged at the forward girth. "Don't let anyone steal our rifles while I'm gone. Buckle on that 44 Colt of yours and be ready for the blood-and-thunder stuff you used to pray for."

Jim grinned derisively.

Leonard, now in the saddle, said slowly: "You've got to protect thirty thousand dollars' worth of sawmill for the next two or three days. It's a man's job, and—and I wonder?"

"You'll eat that!" Jim said angrily.

"Maybe, when you grow up. So long, Jim. See you day after tomorrow." Dona Rosa pushed open the creaking gate of the corral, and mule and rider trotted away westward on the trail to Capão Bonito, twenty miles distant.

JIM'S anger lived on only as a burning desire to show Leonard and himself that he was more man than boy. He spent a busy morning at camp. He sold sugar and coffee to a bearded, barefoot native and treated the infected arm of Francisco, the log roller. He bossed the building of a wagon bridge across the brook, hammered out an iron brace for a log cart, gave orders to ox and mule drivers, to choppers and to millmen. At ten o'clock he emerged, tired and greasy, from a long struggle with the steam-engine valves, and walked to the door of the engine room. The winter tropic sun had driven the chill from every hilltop and hollow, and now beat down with almost the fierceness of January, the hottest month of southern Brazil.

Jim gazed disconsolately northward from the mill and beyond the brook, where rose a slope of pasture land shaded here and there by Paraná pines. Suddenly he jumped. Four horsemen, riding single file along the trail, came loping out of the woods. Jim stared hard at them, and noted even at that distance their loose, blanketlike cloaks and the glinting coins on their wide hats. Then he whirled about and called to Condinho, the big mulatto sawyer.

"Come here!" Jim ordered in Portuguese. "Tell me what you think of those fellows."

Condinho watched the approaching riders for a moment, and his face darkened. "They are bad men, senhor, from beyond the Rio

Paraná. See their silver baubles? Hear their noisy shouting?"

"Condinho! Help Amantino tighten those valve-plate bolts. Quick, mind you! Then you and Francisco start up the vertical

One who would succeed in Brazil has always to be polite. "You must come in and have coffee," said Jim to his visitors. "Now excuse me one moment, please. My cook wishes to speak with me."

He strode to the kitchen and stood before Manoel.

"Senhor!" exclaimed the cook in an agonized whisper. "A thousand apologies—but, senhor, don't you see, those men are not mere *vijantes*! They are *banditos*! I heard them talk as I got water down at the brook! They plan to steal your Winchester rifles and God knows what else! Santa Luiza, how I ran to get here!"

"Thank you," said Jim. He strolled back into the corral and faced the four as they walked through the gate. They looked at him and stopped.

"Sorry, but we have no coffee for you," said Jim. "And the store is closed for the day. If there is nothing else I can do—"

The men glanced at one another, and more than one hand trembled with eagerness to make a lightning move. Jim confronted them, hands on hips, the right hand a little



"Will you Americanos be kind enough to lend us your matchless Winchester rifles?"

saw and cut boards as usual. Say nothing to the others, but see that your shotgun and pistol are ready."

Jim walked over to the riders. "Good day, senhores. As you surely know, this is the sawmill camp of the Americanos. Can I do something for you?"

A small wrinkled man answered: "And *bom dia* to you, senhor. It is indeed a privilege to meet one of the renowned Americanos. We are resting from our arduous labors. We come to see your famed sawmill, and to buy at your store."

Before Jim could reply, old Manoel, the cook, called to him from the kitchen: "Senhor Jeem! Please come here."

all right. I sure hope Leonard doesn't run across them anywhere. They're crazy mad now."

About this time tireless Dona Rosa was taking Leonard at a smart trot down the main street of Capão Bonito.

JUST as Leonard and Dona Rosa came out from the main street into the town square, and turned to the right toward the hotel, a white-clad man burst from a doorway and ran in front of them. He was Senhor Reymundo, the mayor of Capão Bonito. "Wait, if you please, Senhor Leonardo!" he cried. "*Bom dia*, Senhor Reymundo," said Leonard, drawing rein. "Can I be of service?"

"*Deus sabe*, yes! The revolt goes so badly in São Paulo that the government has taken all of my soldiers but ten and has seized every rifle in town. We are now open to attack from any of these marauding bands of banditos. Santa Maria!"

He glanced nervously across the square, then went on: "I implore you to pardon my abruptness. Will you Americanos, who have already done so much for our town, be kind enough to lend us your matchless Winchester rifles?"

Leonard's heart sank. He and Jim loved their guns, had used them on more than one trip after jaguar and tapir, and needed them now at the mill as never before.

"Blast the luck!" he exclaimed in disgust. "Pardon me?"

"That is English for willingly. I cannot tell you with what pleasure we Americanos will lend our arms to the town, though we sorely need them to protect our mill."

Senhor Reymundo gushed a torrent of thanks and added: "I cannot send for the rifles now. Four of my soldiers are out confiscating shotguns in the Fordé today, and I need the others here. Three or four men will arrive at your camp in the Fordé before tomorrow noon."

At camp that night Jim spent many weary hours. Fearing a nocturnal call from the banditos, he made Condinho take turns with him at watching. The long night passed without incident.

For most of the next morning Jim labored away in an effort to show Alfredo, the new lumber piler, wherein lay the difference between nine-inch and twelve-inch boards, and between boards with knots and boards without. He was still explaining at quarter to eleven, the hour of the first meal.

Jim was about to sit down to his repast when he heard the swift *clip-clop* of Dona Rosa's trot, and then the creaking of the corral gate. He went out to meet his older brother. "Hello, Leonard! Thought you wouldn't be back till tomorrow. Did you get the oxen?"

"Hello, Jim. You bet I bought the oxen. Twelve of them, and corks. Any excitement?"

"Everything's fine. That's great about the oxen. Come in and eat."

His rice and beans half-devoured, Leonard suddenly stared at a blank space on the wall of the shack.

"The rifles are under my bunk," remarked Jim.

"Good idea," said Leonard. "But we're going to lose them today, and it sure is tough. Reymundo, the mayor, wants them. Some of his soldiers are coming for them this morning in the town flivver."

"Blast the luck!"

"That's what I said, but it didn't help. Listen!"

A distant roaring sound brought them to their feet. A half-mile to the westward, where the trail to town showed plainly as it rose over a hump in the pasture, they descried a great cloud of dust.

"There they are now!" Jim exclaimed. "Whe-e-e! Look at 'em tear!" The little car whizzed out of sight behind the house of Felicio, reappeared to shoot down a small hill and across the corduroyed swamp road,

and finally halted, fuming, at the gate in the fence.

The brothers went out to receive their visitors. The machine bumped fussily up the barren rise and came to a stop just outside the corral gate; and for an instant all was quiet save for the radiator, hissing like a leaky peanut roaster. Within the shadow of the top of the car sat four rough-looking men attired in the red-trimmed blue of the soldiery.

"Bom dia, senhores, won't you arrive?" was Leonard's idiomatically perfect invitation.

The two soldiers who had ridden in the rear now promptly alighted.

THE driver of the Ford and the man beside him remained in their seats. "You will please pardon us," said the man behind the wheel, a shrunken old fellow much too small for his suit. "Senhor Mayor stated that you would know we came for your rifles, and he ordered that we go in not even for coffee."

"That's quite all right," Leonard assured him and beckoned to the two soldiers who had got out of the machine. "Most noble sirs, Senhor Jim will now go to our house with you to get the Winchesters."

Apparently Jim did not hear; standing motionless, he glanced furtively from one to another of the four soldiers. Then he walked round to the left side of the car and, going very close to the driver, said, "Your engine runs unusually well, doesn't it?"

"Yes," replied the little old man, stirring in his seat and looking out over the distant pine ridges.

"What's the matter?" Leonard demanded in English.

Absently shrugging his shoulders, Jim answered, in a matter-of-fact tone: "Leonard, there's something mighty queer about these fellows. Watch out. I must take them to the shack before they get suspicious. Can't say more."

Jim turned to the two patiently waiting soldiers. "Let us get the rifles," he suggested.

One saluted; the other tugged at his moustache. They walked with him into the corral and across it toward the shack. As he was chatting with the fiercer-looking of the pair Jim tripped over a stick and lurched heavily against him. The red and gold cap of the soldier fell upon the ground.

"A thousand excuses, senhor!" Jim exclaimed. "I'm an ox! How silly of me."

He caught up the cap, beat the dust out of it and restored it to the owner, who wrinkled his face into a forgiving smile and growled amiably, suspecting nothing.

Jim and the two soldiers reached the shack. "Enter," invited Jim, holding the door open.

The men in uniform bowed profoundly and walked by him into the cool and shadowy interior. At the soft sound of the door shutting behind them the soldiers whirled with quick suspicion. Amazed, angry, afraid, they gazed straight into the

on the sun-baked clay, and the door of the shack swung open. Old Manoel hesitated only a moment. Then, leaping to the side of the fallen ruffian, he seized the fellow's gun and leveled it beside Jim's Colt at his com-

"Os mãos por cima!" So loud thundered Jim's command that down at the mill Condiho heard above the shishing of his saw and, looking up, gazed with horror.

Like a bitten jungle cat whirled the dried-up old bandito and fired from the hip. His bullet splintered through the door. Jim's heavy rifle roared, and the desperado dropped limp on the ground, his skinny claws jerking spasmodically.

"Not a move!" Jim threatened the other, aiming at his chest. He strode toward him across the corral, his narrowed gray eyes striking like needles into the blood-shot and wavering ones of the bandito. "And, and, if you have killed my brother,"—Jim's words shook with anguish,—"in one minute you shall be the dearest dable in the state of São Paulo!"

"KNOW any more good jokes?" asked a cheery voice, and Jim stared as Leonard jumped to his feet. "Not having my gun," he explained, "I thought it wise to flop quietly when that old bandito tapped me on the head. Thank Heaven, you're all right, Jim! You are sure a wonder! What in blazes do you suppose is the meaning of all this? Looks like the old villain's about to recover from his smashed shoulder and pride." Leonard stooped and picked up the fellow's revolver.

Jim grinned at him. "I'll tell you everything. No, wait—we'll have bulldog face explain instead. Give us the story," he commanded in Portuguese, prodding the bandito with the Winchester. "All of it and quick!"

"Y-yes, senhor," came through lips that trembled. "We heard in Capão Bonito that the soldiers would come here today. So this morning we felled a tree across the trail in the *matto* near the Barracco Fundo and waited. Just as we had hoped, the soldiers came in the Fordé, stopped and, dismounting, lifted together at the tree. At this instant three of us covered them. Then the fourth went among them and took their arms. We now bound the soldiers to trees, donned their uniforms and drove in the Fordé to your camp."

"But how on earth did you—" Leonard started to ask his brother.

"It was simple enough," interrupted Jim. "These fellows are banditos that came snooping around here yesterday. I was a fool not to recognize them at once today. But I suspected that old crab-apple driver from the first, and was sure of it all when I knocked off the pirate man's hat and got a look at his scar."

Leonard stretched out his lean brown hand. "You've saved our rifles and payroll and probably our necks. You're a man if there ever was one. Shake!"



"Sorry, but we have no coffee for you," said Jim, "and the store is closed for the day"

maw of Jim's revolver. "Erga os mãos!" he hissed.

Up shot both pairs of hands, but the rougher-looking soldier had a mind as quick as it was brutal. "Look out!" he warned at the top of his lungs. "They know! They—"

The barrel of Jim's six-shooter, swinging with ferocity born of fear for his brother, struck the fellow on the temple, and he fell without another sound.

"Shut your mouth!" Jim growled to his companion, shoving the gun into the man's fluttering chest. "One word, and I'll drop you!" He snatched the revolver and sword of the soldier and called softly, "Manoel! Come!"

The footsteps of the cook pattered swiftly

rade. In such crises Manoel was the coolest and quickest cook in Brazil.

"Dogs, these are!" snapped Jim. "The same banditos and desperadoes that came yesterday. What fools to think that stolen uniforms and lowered caps could hide them from us! Guard these *porcos*, Manoel! One sound from either of them, and you blow his head off. Understand?"

"Certainly, senhor."

Jim sprang across the room and pulled a Winchester from under his bunk. Then, opening the door, he stepped out into the sunlight.

"Leonard! My God!"

A few feet from the Ford, with two uniformed bandits bending over him, Leonard lay motionless on the warm red clay. Jim brought the Winchester to his shoulder.

The Shrimp in the Shell

By BARKLIE HENRY

Illustrated by CHARLES L. LASSELL

SOPHOMORE HERB WINKLE, shortest oarsman in the upper-class boathouse, stood on the edge of the float and watched the Varsity and the Junior Varsity crews row up the last straight stretch to the float. The megaphone voice of Coach Jim Raymond, alias "the Old Man," came louder and clearer from across the water—changed from distant thunder to the bellow of a charging moose, now tortured, now enraged, as he swung his straining voice all in one rhythm with the men's straining bodies.

Herb Winkle's eyes lost no detail. He saw the two crews' oars stop moving and gather the white spray on their tips as the slim shell drifted swift and sure against the float.

There are perhaps a dozen colleges in the East, and about the same number of preparatory schools, whose crews race one another in eight-oared shells over distances ranging from half a mile to four miles. A shell is about sixty feet long, and eight men sit in it, one behind another, each equipped with an oar. The oarsman nearest the stern sets the pace for the seven men behind him, and is called the stroke. A coxswain steers.

The oarsmen sit on seats which slide backward and forward about a foot and a half.

Thus the oarsmen not only pull with their arms, as in an ordinary rowboat, but also push with their legs and their backs. Their feet are laced up in shoes which are riveted to wooden braces inside the shell. This gives them a firmer shove with their legs.

The skin of the shell itself is a thin layer of wood, generally cedar, and most of this skin is exposed on the inside. One false step—an oarsman's foot through the bottom—and a beautifully constructed craft, meticulously planked and delicately polished, costing anywhere from six hundred to a thousand dollars, is ruined for Varsity racing to the end of time!

The two crews unscrewed their locks and shipped their oars. The coxswain yelled a throaty order, and four men climbed out, then four more, while the first four held the fragile ship firm against the float.

"What big birds they are," thought Herb Winkle, who only weighed one hundred and

forty-four pounds. Fat chance for him! The lightest man on the Varsity crew weighed a hundred and sixty-five. Varsity oarsmen never weigh much less than that.

Herb Winkle aimed to be stroke of a winning Varsity—not some day far off in the future, but now, as soon as possible. Jim Gray, the present stroke, weighed a hundred and seventy-nine. Worst of all, Herb's aspirations so far had put him no higher than stroke of the Sophomore class crew. Stroke a winning Varsity? Why, a mosquito might just as well try to push a train. A rude voice interrupted Herb's reverie.

"Whatcha doin', Winkle? Gettin' ready for a swim? Tain't May yet, son."

Herb turned. "Hello," he said. The man was one of the staff who worked in the repair shop. "How did you like the Varsity this after?"

The repairman scratched his chin. "Want to know sump'n, Winkle? I heard the Old

Man tell the cap that he wasn't satisfied with Jim Gray's strokin'."

"That can't be true," said Herb, suddenly interested. "He was only talking."

"All right," said the rigger. "He was only talking. But you wait and see."

Winkle said good night and walked down along the river path to the bridge and across it to the college.

So Raymond wasn't satisfied with Jim Gray's stroking. Herb decided to keep himself on the alert during the next few days. Something might happen. You never could tell.

THE next day, by a coincidence, Winkle's Sophomore crew was scheduled to row at the same time as the Varsity.

Usually the Varsity disappeared down the river ahead of the Sophomores.

Here's where Fate comes into the story. Fate is that invisible fellow who goes around taking lollypops out of one person's mouth and putting them into somebody else's. This afternoon Fate, for no good reason, reached his hand down into the engine of the Varsity launch when no one was looking and pulled an obscure electric wire until it came loose from its connection.

As the motor died, the Old Man shouted at Arthur, the engineer, as loud as he could, "Do you think I come out in this launch for a picnic? You hurry up and get the old spitfire started!"

Arthur fumbled over the engine indiscriminately.

At last he said, "She won't start."

Just then, the Sophomore crew, followed by Coach Alf Banks's launch, appeared round the bend. The Old Man waved at Alf, and after an interchange of courtesies Coach Raymond left Arthur to his fate and joined forces with Alf Banks and the Sophomores.

"The second Varsity went out early," said the Old Man, "and my boys need somebody to pace 'em."

The Sophomores, full of zip and ginger, drew level with the Varsity.

"Sophomores, take a length lead," said Raymond. "All right. Steady. Both crews, now, paddle down the river."

Herb Winkle drew a long breath. "Now's my chance," he said to himself.

Sixteen oars left sixteen swirls spiraling behind them. The Varsity swung into a long, steady paddle. Herb Winkle in the excitement of the moment sent his crew off to a racing start without orders. The Varsity paid no attention, however, and tried to ignore the Sophomores' racing tactics.

Who couldn't pull out a couple of lengths on a bunch of silly Sophomores? But Herb Winkle, short man of the squad, weight one hundred and forty-four, never lowered the stroke. In a quarter of a minute the Sophomores had added a length to their lead.

The Old Man, seeing a good chance to test his Varsity, began to call for a higher stroke. Herb answered with a sprint. The Varsity raised it higher, but in half a mile they never gained an inch. Then both crews let her run.

Coach Banks pretended to be furious. "You poor ham," he called across to Winkle, "what do you think this is—the big race?"

Herb stared at him innocently and said nothing.

Coach Raymond repeated Alf's remarks, except more emphatically. Grumbles and mutters echoed across the water from the Varsity. The words "rotten," "lifeless," "that cocky little shrimp at stroke," were distinctly audible.

HERB wanted to laugh. He felt like jumping up in the shell and yelling.

Rowing is a queer sport. So much depends on proper harmony of mind within a crew as well as perfect harmony of body that the slightest sense of discouragement or discord can ruin the chances of an otherwise promising eight.

With the first race, against another college crew, two weeks off, the Varsity began to realize that the situation was becoming critical.

Next Monday morning the stroke of the second Varsity displaced Gray, and Gray moved down into the second crew. Meanwhile, reports of the Sophomores' good showing against the Varsity had spread through the boathouse, and Herb Winkle's eight began to earn a name for themselves as the "liveliest bunch on the river." And almost overnight everybody round the boathouse was referring to the cheerful stroke of the Sophomores as "Shrimp." Herb's nickname spread like a crack on a shell bottom.

The new Varsity stroke was a pretty oar to look at—smooth, rhythmical, steady. He seemed to fit into the Varsity boat as if he had been rowing there all year. By the time of the first race he was as good as when he first stepped into the shell—but no better. They lost the race by three lengths.

After it, the Old Man shifted Gray back to stroke. During the next two weeks the Varsity began to improve. But a week before the second race Gray began to develop a habit of catching crabs. He couldn't seem to get over it. In the last practice before this race, however, Gray caught no crabs. Everybody considered this a good sign. In the race itself the Varsity led their opponents halfway down the course and

looked better than they had looked all season. But suddenly, without warning, Gray—what Gray did in that race is too dreadful for any oarsman to think of! The Varsity lost by two lengths.

The following Monday afternoon gloom had settled on the Varsity boathouse.

Before practice on Tuesday afternoon the Old Man sought out Alf and held an important conference with him in one of the doorways of the boathouse. There was not much noise there that day. You could have heard an oar drop, and that is saying a good deal for a college boathouse.

"Have you got anybody I could try, Alf?"

"About four fair-to-middling strokes," said Alf, "but I don't know that any of 'em—"

At that moment the loud and unmistakable howling of a young man, either in great pain or in great exultation, echoed through the boathouse. Perhaps it would be an exaggeration to say that this was the first sound that had broken the stillness of that cool spring afternoon.

The Old Man jumped nervously. "Who in the name of mud's singing round my boathouse today?" he bellowed.

The singer continued and broke into a new refrain:

"I may be broke,
But I'm going to stroke
The Varsity crew this sea-ZUN!"

Then the singer appeared from behind some shells. The Old Man clenched his fists savagely.

"Oh, hello, Alf. Good afternoon, Raymond," said the singer with what seemed to

seat Herb quivered all over. He was so nervous that he almost slipped off into the water as he climbed down to his seat. But as soon as he had adjusted his stretcher, or foot-brace, to suit the length of his legs and had taken a few splashing practice strokes, his quivering left him, and he felt ready to go—like a stick of dynamite listening to the sizzling of its own fuse. When they started down the river he suddenly realized that he had just what all the other strokes had lacked: fire.

From the launch he almost looked ridiculous, he was so small. "But the boat hasn't traveled like this all spring," said the Old Man.

From that time on Shrimp was a fixture in the Varsity.

The big race of the season was still four weeks ahead. At the end of Shrimp's first thrilling week the whole squad moved into its final training quarters on the Thames River, three hours by train from the college. Their rivals lived a mile above them, and both camps watched each other's movements like cats.

It was June, and a succession of beautiful days kept the men's spirits at a high level. Time passed quickly. They rowed twice a day and improved in every practice. Shrimp couldn't believe that he was there. It seemed too good to be true. At last the week of the race drew near, and then the day before the day before, and then the day before, and finally the day.

The crew seemed to be going well at the end of the training period. But that other crew, up the river, looked a little better. They had a real stroke—a big rangy fellow who was the most perfect and the most

their shell into the water. Shrimp had a feeling in the pit of his stomach as if he had just reached the ground floor on the fast express from the top floor of the Woolworth Building in New York.

"You can't lick this crew by rowing along a nicely laid out schedule," the Old Man had told him. "You've got to beat them off the mark and go just as hard as you can all the way. Row 'em till they bust. You can do it, Shrimp."

Herb knew this meant using up all his strength in the first half of the race, then finding enough more hidden away somewhere to enable him to sprint to the finish. Impossible? Yes. But Shrimp knew that oarsmen had done the impossible before. "I will start you in the following manner," boomed the referee's voice.

"It'll be over in a third of an hour," thought Shrimp, clenching his fists round the oar handle. "Mustn't grab it too tight. Cramps in the fingers."

"Go!" Oars churned the water. Slides rumbled a hollow chorus. They went off at forty strokes to the minute.

"Why, it's a cinch," Shrimp thought. Shrimp always felt that way the first minute. One minute doesn't give you time to get winded. It just feels easy—easy as pie. "Boat never went better. We've jumped 'em a little." Shrimp's lungs expanded into a great gasp. All of a sudden he thought he could never stick it out. Two minutes at forty, and tired already!

"Call for ten," he blurted to the cox at the half-mile mark.

"One, two, three—"

How that hurt! The sweat broke out now.

A momentary thin shaft of sunlight struck Shrimp full between the eyes. It felt boiling hot. His mouth dried up. Not past the mile mark yet, and he was all in.

"I'm gonna go on, I'm gonna go on." The words fitted into the rhythm of the stroke. "Gonna go on." He forgot to say it again, and this time the cox called for ten without asking him. He watched the crew beside him. They were so close he could hear every sound in their boat. "One, two, three, four, five, six—"

That second ten gained him half a length.

The other cox called for an answering ten. "One, two, three—" It was like a monster in a dream taking slow deliberate steps toward you. "Ten!" The other crew hadn't gained a foot.

"Four miles is so darned long there's no use thinking how long it is," Shrimp said to himself. This comforted him. He wasn't afraid of the distance any longer.

An insidious desire to take it easy crept upon him—a sort of heavy feeling all over. If he slacked off for a few strokes, no one would find out. "No! No! No!" He repeated the denial over with each stroke as he jammed his oar through the water. Words, though, didn't mean much. They

were just drumbeats to keep the all-necessary rhythm going.

"Two-mile mark!" screamed the cox. "Only two miles, boys. We've half a length on 'em. Give her ten more. One, two, three—"

Each stroke sapped him worse than the last.

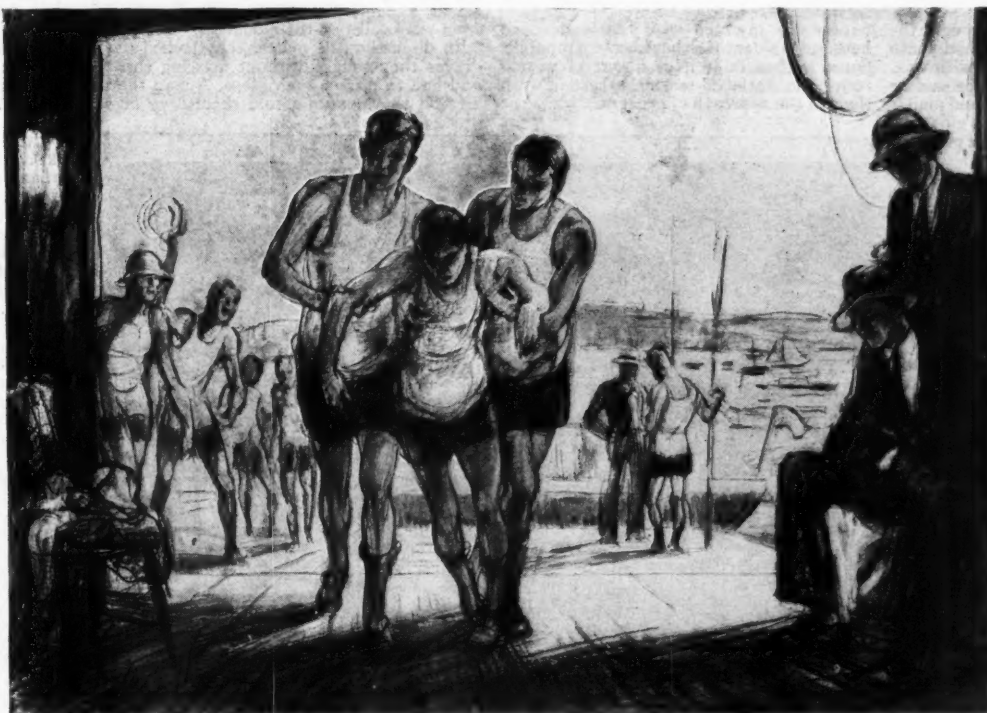
"Those tens," Shrimp grunted to the cox, in a crazy desire to show that he was not too tired to talk, "that's what'll lick 'em!"

"Shut up, you fool!" Less than two miles more. Where had those first two miles gone? They seemed hours and hours ago already. And still his crew was leading by half a length. He remembered how good the other crew had looked in practice—how scared he had been when he read their names and weights in the papers. And here he was stroking the boat that had led them for two miles.

"How far?" he gasped to the cox.

"Mile and a half."

ALL at once, Shrimp never knew how, the other crew caught up and drew even. In ten more strokes Shrimp had to look out of



"More tired than I thought," Shrimp whispered as he stumbled into the boat house, singing weakly

the Old Man suspiciously like impertinent politeness. Then, noticing their expressions, he continued, "I was just singing to myself."

"Oh, were you?"

Then, to the surprise of the other two, the Old Man's glance, as he looked Herb Winkle up and down, changed suddenly from rage to intelligent interest.

"Say, Shrimp," said he, remembering the picture of a certain Sophomore crew pulling away from his big fellows several weeks ago, "you want to stroke the Varsity, don't you? Well, if you promise not to sing any more, you can come out in the launch and take a crack at it today."

Herb stuttered something, then rushed upstairs to change his clothes.

THE Old Man put him in the Varsity halfway through practice. The men preceding him had done poorly. The boat hadn't been moving between strokes. It had been dead as a log.

When the big moment came and the launch warped its bow against the stroke

powerful oar in their eight. Shrimp had lost some weight in training and was now down to a hundred and forty. It was to be a four-mile race, and both squads wondered if the Shrimp would be able to last four miles. Men much stronger than Shrimp had broken down on that long pull. And yet he had lasted well enough in all the trials. The sport writers picked Shrimp's crew to lose. That crew had not won all season. The boys up the river had decisively beaten one of the best crews in the East.

The morning of the big day promised perfect conditions. There was a light breeze downstream, barely enough of a ripple to keep the water alive. In the morning races, Shrimp's college lost both the Freshman and Junior Varsity events over the two-mile distance. Everybody in Shrimp's camp said that it was to be expected, though as a matter of fact they hadn't expected it in the least.

The Varsity crews carried their shells out precisely on scheduled time. Five o'clock saw them both on the gangways. Nobody on Shrimp's crew talked much as they put

the corner of his eye to see their stroke man. Both crews were now entering a lane of water between two parallel rows of yachts. Whistles, sirens, cheers—they sounded all far away, like a Victrola when you shut up the sound box.

Back! Up! Catch! Recover! Hit it! Easy! So swung the invincible rhythm that dominated Herb and Herb's oar and the bodies and the oars of all the seven men behind him. He was so done in, that every stroke felt as if it were tearing his insides out, clutching him by the throat. But the rhythm carried him on and wouldn't let him stop.

Out of the screeching maelstrom of noise came a comparatively quiet voice, self-contained, encouraging. "You are doing nicely, Herb. Now we've got to sprint." It was the captain at number seven behind him.

"Sprint!" The cox heard him whisper it and banged madly on the sides of the boat with the wooden blocks by which he held the rudder ropes. Nobody heard it. Instead, they all caught something invisible from

Shrimp's oar, and up went the stroke.

"The one important thing now," said that inward voice of Shrimp's, "is not to let myself get tied up in the arms. I must keep loose on the recover. And now I am going to put more into it. More!"

The two boats were almost even. Half a mile to go. It was now or not at all. Shrimp watched the other crew narrowly. Six was swinging out of the boat, in a relaxed, clumsy circle. He looked about ready to keel over.

The cox saw him too. "Now's our chance to break 'em!" he yelled as loud as he could. Only Shrimp heard him. This time they sprinted for fair and gained half a length. Now the one thing left was to reach that finish line.

"Won't we ever get there?" This question surged through Shrimp's brain, and he couldn't seem to escape from it.

Suddenly he found that he had stopped rowing a second ago, and woke to the fact that the race was over. He had won by half a length.

No one in the boat said anything for about five minutes. At last Shrimp drew a long breath, then brushed the sweat out of his eyes. Already he felt rested. He turned round and said to the captain, half joking, half boasting, "That wasn't so hard, was it? Funny I didn't get more tired."

They mustered up a ragged cheer for the defeated crew, then rode back to the boat-house in the launch. Tired? Oh, no. Shrimp wasn't tired at all. Easiest thing in the world! Everybody knew Shrimp had done a wonderful job, and on the way home everybody told him so.

Shrimp climbed out on the float and stood on his two legs and hummed:

"I may be broke,
But I'm going to stroke—"

Unexpectedly he felt seasick and dizzy. He staggered and tumbled down full length on the float. A couple of his crew mates pulled him up and helped him up from the float. He was intensely happy.

"More tired than I thought," he whispered, as he stumbled into the boat house, singing weakly.

An hour later Shrimp, dressed in white flannels and a very handsome tweed coat, made his way from his shack to the main Varsity dining-room. He found most of the college and what looked like ninety per cent of the population of two cities awaiting him there. A mighty cheer greeted him, and he felt embarrassed. They surged towards him, engulfed him. In one instant his brand-new coat had vanished from his shoulders.

He felt something being pulled over his face. He looked down at his chest. He saw the Varsity sweater for Crew.

The crowd roared. Then they cheered him again. Some one started singing, and everybody picked it up and sang it over and over:

"I may be broke,
But I'm going to—"

This time you can finish the words for yourself.

The Scratches on the Glass

By GLADYS BLAKE

Illustrated by DOUGLAS RYAN

Chapter V. In the Old Watchtower

"I'M writing to—my mother," Gilbert stammered after a moment's hesitation.

In another half-page he brought the letter to an end and put it hastily into a long envelope, which he sealed with wax. Then, to the surprise of them all, he said he was going to walk in to the village and mail it immediately. It was nearly ten o'clock, and the family had been thinking of going to bed.

"Couldn't it wait until tomorrow?" asked Frank.

"No, I've been trying to find time to write it all day, and now I want to get it right off."

Frank then said that he would go with him, and the two boys walked away together while the girls sat on the porch and watched them out of sight. When they were gone the conversation turned again to purple rocks, and Blanche and Nancy spent another half-hour wondering where one could be found, but laughingly evaded their parents' questions as to what was interesting them so. They were determined to keep it all a secret as long as they could. However, just before they went up to bed, Nancy could not resist saying to her father, "What do you want to bet, dad, that Blanche and Gilbert and Frank and I find an Indian treasure before the summer is over? The treasure that your parents searched for in vain when you were a little boy?"

"I won't bet on it," said her father, giving her hair a teasing pull, "because I'd be sure to win, and that wouldn't be fair. There is a prophecy about that treasure which says, 'The Red Man shall return for his own, and no white person find it.'"

"Just the same," said Nancy, "we are going to find it!"

A few mornings later, the Major and Mrs. Morgan said that they had planned to motor to the neighboring village of Monkshood. This left the boys and girls to their own devices.

"Before you go, father," said Blanche, "tell us if there are any Indian relics anywhere round here. Surely this old house isn't the only thing in the vicinity that the Indians left?"

"Indian relics? Well, let's see! If you climb the mountain back of this house, you'll find a little Indian graveyard, and the inscriptions on the tombstones are in the Cherokee language. That ought to prove interesting to anyone looking for Indian relics."

"Yes, we certainly want to see a sample of Sequoyah's alphabet," said Blanche. "But is there nothing else round here connected with the Indian occupation? Any picture-writing on queer old stones, or any totem poles, or anything like that?"

"Nothing that I know of. There's an old log tower up on the mountain that you must certainly see. It is said to have been built

by white people long before the Cherokee nation was invested with the land round here and is older than the American republic. Some settlers built it as a sort of watchtower and stationed sentinels there to warn them of the approach of savages.

tic as a name than Rain-in-the-face and Man-who-walks-on-the-mountain."

In discussing the matter they passed the graves they sought without noticing them and had to retrace their steps. A man they met on the mountain told them they had



Then the young people turned their attention to the ladder leading into the loft, and all went up

When Major and Mrs. Morgan had motored away the boys and girls started up the mountain. It was a pleasant little path they trod, and the summer morning was the best of its kind, but neither the beauty of the day nor the scene claimed much of their attention. They were on the trail of gold, and in the hope of finding something that could be called a purple rock they were eager to visit every place in the neighborhood connected with Indian history.

"I've an idea!" cried Nancy. "Maybe one of the Indians buried in the cemetery where we are going was named Purple Rock—Chief Purple Rock! Maybe it was from his grave that somebody measured three ells and buried a treasure!"

"Oh, no, Nancy, that is too fantastic," protested Gilbert.

"Why? Indians are named all sorts of queer things. Purple Rock is no more fantas-

gone too far and went back with them to show them the little cemetery in a tangle of vines and bushes. The graves were sunken and the inscriptions on the stones half obliterated, but the young people looked at them with interest. Gilbert pulled the weeds off two or three of them and kicked aside the rocks, sticks and old tin cans that littered the place. He said he thought the county ought to appoint somebody to take care of those ancient graves and keep them decent.

"This land doesn't belong to the county; it belongs to me," said the man who had brought them there. "I bought it a year ago, and I'm thinking strongly of opening these graves and seeing what the Indians buried in them. Very likely there'll be gold ornaments that will net me some real money."

His mercenary attitude shocked all four of them, Gilbert Kent more than the others.

THE girls were protesting at this when the man suddenly howled in a way that startled them. Even Frank jumped in astonishment.

"What's the matter?" they all cried. "I accidentally stepped on his foot," explained Gilbert. "So sorry!"

"I thought Stone Mountain had fallen on me!" cried the victim. "You've crushed my instep. I'll be lame for life."

"So sorry!" repeated Gilbert. "I'm very clumsy. What's Stone Mountain, by the way?"

"It's a mountain of solid granite here in Georgia, and it's what you felt like when you came down on my foot," said the man sulkily.

"Is it purple?" asked Nancy eagerly.

"I bet it's black and blue," grumbled the victim.

"I mean the mountain of rock?"

"Why, no! It's gray."

Nancy lost interest in Stone Mountain.

"Now, what was I saying a while ago?" went on the man, still nursing his foot. "Oh, yes, about these graves. I'm going to have them opened soon and moved away from here. This slope is such a pretty place for a cemetery that I want to be buried here myself when my time's up, and I don't want to rise up on the last great day in company with a lot of old red Injuns!"

"Well, I wouldn't dig up the bones of people who died of smallpox," declared Gilbert. "I'd be afraid of infection."

"Smallpox?" gasped the man. "Did these Indians die of smallpox? How do you know?"

"Can't you read the inscriptions on the tombstones?" asked Gilbert, pointing.

"No, I can't read a word of Cherokee. I'm mighty glad you told me. I certainly don't want to molest the bones of smallpox victims even after this lapse of time. Might be germs there still."

After a few more words he went away, and immediately the girls turned to Gilbert with amazed questions. Could he really read Cherokee?

"I didn't say I could," replied Gilbert evasively. "I just asked the man if he couldn't."

The tower toward which the young people now turned their steps was some distance from the cemetery. It was on the heights just above the town of Monkshood and overlooked the village homes. On their way thither the boys and girls encountered Cordy's small son Dink, picking blackberries to fill his mother's flaky pie-crusts that were scheduled to appear that night on the Morgan table. They greeted him cheerily.

"Hello, Dinkum-a-dinkum-a-di-dee-o!" cried Blanche, quoting the words with which Cordy had sung him to sleep in his babyhood and from which his nickname was derived. (Cordy herself had told them this. His real name, she had informed her white folks proudly, was Colonel Thomas Whitworth—a certain Colonel Thomas having been her employer at the time of his birth!)

"I say, Dink, show us the way to the old

watchtower hereabouts," said Frank, displaying a five-cent piece. "The blackberries can wait."

"Ef de do's locked, you can't git in," he informed them as they came in view of the log structure which so long ago had been built in the wilderness by white people trembling at the thought of savage foes creeping upon them unawares. "The windows ain't nothin' but slits."

"Is the door often locked?" asked Nancy. "Sometimes 'tis. County put a padlock on it to keep tramps out. 'Tramps wuz sleepin' in dar at night."

But they found the door standing open, though the padlock hung upon it as if some one had forgotten to close it. In they all trooped and looked round with interest. It was a small log building of one room and a loft, but it was built higher than most log cabins of its day because of its use as a watchtower. The windows, as Dink had said, were the merest slits in the thick walls. Probably the white settlers who built the place took refuge there in time of stress, and the windows were intended only for loopholes from which to shoot the savage foe. A large block in the center of the lower room was a relic of the days when the tower had been used as a slave market.

"On that block, Dink," said Frank solemnly, "your ancestors once stood. Did you know you have ancestors?"

"Suh?" questioned Dink, who had not been listening.

"I asked you if you knew you had ancestors?" Dink scratched his head.

"I s'pect I has," admitted Dink. "Mammy says I catches ever'thing!"

It took some time to explain to Dink that ancestors are not a disease, or if so are hereditary and not catching. Then the young people turned their attention to



"A brand has lit on one of the logs, and it's smoking," called Blanche. "I see a little flame!"

the ladder leading into the loft, and all went up. From the loopholes in the loft a splendid view could be obtained of the surrounding country; the little town of Monkshood lay spread out without a secret. The view from the tower was almost as revealing as a flight in an airship. They could see for miles.

"This is nice! I like it up here!" cried Nancy.

A pensive mood descended upon Blanche. She was thinking of the three races that had figured in the history of the old tower—the white people who had built the tower as protection against the red people creeping through the wilderness below, and, later in time, the black men who had stood on the slave block to be sold at auction. Now white, red and black lived in the land in peace and amity.

But in the tower the peace between the races was not to continue. An imp of mischief suddenly invaded the soul of Colonel Thomas Whitworth. Perhaps it was the spirit of one of those ancestors who had once stood on the block in this very building and cherished enmity against the race that had enslaved him. Whatever it was that possessed him, Dink slipped away from his companions, stole softly down the ladder and out of the tower, and once outside closed the door firmly and snapped the padlock in place.

"Yah! You can't git out!" he cried, doubling up with laughter. "You can't git out! Do's locked!"

"Dink, if you don't open that door I'll tar and feather you next time I catch you," threatened Frank. But he spoke in what is known as a conversational tone. It didn't seem a serious matter.

"I's gwiner pick berries fur mammy," announced Dink after indulging his laughter to his heart's content. "When I gets done I'll come let you out."

"Dink, if you don't come back here—" began Frank again, when Blanche stopped him.

"This is a case for diplomacy, Frank," she objected. "Don't tell him what you'll do to him if he doesn't come back; tell him what you'll do if he does. Offer him money or candy. He'll surely weaken."

But Dink paid no more attention to bribes than to threats.

"He'll come back directly," said Blanche. "I wonder why that bell is ringing so loudly in the town?" she added a moment later as a sudden clamor burst upon their ears from the direction of Monkshood. "Oh, look! A fire!"

ALMOST directly beneath the little plateau on which the tower stood a building had burst into flames.

"Oh, boy! Don't I wish I was down there!" cried Frank.

"It's lucky the wind is blowing in this direction," remarked Gilbert. "If it were blowing the other way the town might be in danger."

The flames roared furiously; blazing bits of wood were swept on the high wind towards the tower, and the prisoners began to feel uneasy.

"Let's all scream at the top of our voices, and maybe we can be heard in the town," suggested Blanche as the sparks came nearer and nearer.

"Not even if everything were quiet down there," said Frank discouragingly, "and with all that hullabaloo a siren would shriek in vain. Gee whiz! What will we do? We can't possibly get through these little slits of windows. Come on, Gil, and let's see if we can break open the door."

The two boys hurried down the ladder and put their shoulders against the heavy door. But the lock outside was no two-hundred-year-old affair. It was new and strong, and they strained against it in vain.

"A brand has lit on one of the logs, and it's smoking," called the girls who were keeping watch from the loopholes in the loft.

"Can't you reach an arm through the window and put it out?" Frank called back.

"No, it's beyond our reach!" answered Blanche. "I see a little flame!"

The tower was on fire.

TO BE CONTINUED NEXT WEEK.

It's All Fun

By Q. Howe

V. Frenzied Flivving

I DID not realize how many burdens were being laid on my shoulders when Hannah made me ask that unspeakable Hawkins girl to the Prom. George informed me that I would have to take her to the dance in an automobile, and at his suggestion I have just purchased a Ford racer for the sum of \$75. He at once took me out for a lesson, and I became so fascinated with my purchase and so sure of my skill at manipulating it that I rashly embarked by myself. As soon as I was on the open road I turned out to be quite efficient at rounding corners and avoiding collisions with other drivers. I was rather surprised that my racer made no better speed than it did, for, although the engine made a tremendous din and I felt that I was surely going fifty or sixty miles an hour, several machines passed me at what appeared to be a quite leisurely pace.

At five o'clock, having driven for well over an hour, I decided to turn about. It was growing dark, and I was becoming disturbed at the noises the engine was making. It did not seem to fire regularly, but would run listlessly for several turns and then give forth a loud report. This grew more and more pronounced, and to make matters worse my lights refused to work. At quarter past five I was lucky enough to strike a garage by the roadside, just as my motor expired altogether.

A surly thick-set little fellow with tiny piglike features was working on a battered automobile that stood by the door when I coasted up. He was quite alone.

As he took no notice of my arrival, I climbed out of my racer and approached him. "Excuse me," I said, "but I find myself in some difficulty, and I require assistance. My lights are not functioning, and my engine has entirely stopped."

It was quite three minutes before he lifted his head from his work and said, "What?"

I repeated my statement, but before I had finished he turned his back on me and fell to hammering with such a frightful din that conversation was rendered impossible. It was a good five minutes this time before he turned upon me again with the question, "Where's your car?"

I jumped about quickly, fearing it had been stolen while my back had been turned

for I did not understand how he could fail to see it, as there were no other cars anywhere about. It was there all right, and I pointed to it proudly.

He shook his head. "Where'd you get that thing?" he asked.

"I just bought it this afternoon."

"How much did you get set back for it?"

"Seventy-five dollars."

"What?"

"Seventy-five dollars," I repeated apologetically.

"Well, you paid enough all right."

"Yes," I agreed. "It seemed to me a fair price. The car itself is a 1916 model, and the special body cost two hundred dollars."

"In German money, you mean?"

"Oh, no," I assured him, "in American money. It was made in this country."

"Pretty weak-looking back tire you got there," he observed, giving the right rear wheel a terrific kick. Evidently he had selected a weak spot, for I was startled to hear a sharp hissing sound and to see the tire slowly flatten out as the air rushed out the hole made by the garage man's boot.

"See?" he announced triumphantly.

"Yes."



"Look at that," he said after he had bounced up and down some thirty or forty times. "See how easy I bent that running board!"

ning-board was twisted down to an appreciable angle. The mudguards nearly scraped on the tires.

"I wouldn't take that thing if I was paid to do it," he announced.

"But no one would pay you to take an automobile," I pointed out. "You have to pay some one else in order to get one."

"Quit your kidding."

With this remark, he flung open the hood over the engine.

"How's your timer?" he inquired.

"It's running all right now," I replied, consulting my wrist watch. "I make it just twenty minutes to six."

He turned his head half round and gave me a scornful look as if I had said something foolish, and set to work.

"You've got a leaky radiator, the insulation's worn off a couple of your wires, you need a new timer, your carburetor adjustment's bust, and you've got a cracked spark-plug."

"Wait a minute," I cried. "I think I know what the trouble may be. I haven't any gasoline."

Between us, we pushed the car to the pump, and he filled the tank. After some cranking, the engine started and ran well.

The offensive fellow sat in the driver's seat and raced the engine until I thought the car would fall apart.

"Hear that knock?" he yelled. "Carbon."

Still the engine raced.

"Look at that baby boil!" he shouted as the water began to bubble over the radiator cap. I did not see why it was necessary for him to put the engine to such a strain, but he seemed to take an insane pleasure in trying to blow my machine up for me.

Here, you take it while I fix that adjustment on the carburetor," he said and leaped out of the car. I saw that the time for quick action had come, if I wanted to save my car, and as soon as I jumped into the seat I pressed down on the left-hand pedal, and to my delight the car rushed forward. The garage man had gone inside, probably for some dynamite to blow the engine apart with, and I heard his indignant cries behind me as I sped toward home. For a good half-hour I was quite contented. I had not heard the motorcycle policeman on my trail.

TO BE CONTINUED.

FACT AND COMMENT

SPEECHES THAT ARE MEASURED by the hour will die with the hour.
—THOMAS JEFFERSON.

THOSE WHO ARE SKEPTICAL about the value of "domestic science" as taught in the public schools will agree with the mayor of Lynn who expressed indignation at having to pay bills of \$181.75 for an automatic potato peeler and \$295 for a meat chopper for the department of education. "What incentive has a young man to seek a wife," asks the mayor, "if he thinks she must have a \$181 machine to peel her potatoes and a \$295 meat chopper to prepare the breakfast hash?" Can it be that the mayor of a modern city hasn't learned the difference between housekeeping and domestic science?

MOST OF US think of the radio as a source of recreation or pleasure or information for ourselves. How many of us think what it may mean to some one less fortunate? An old lady in New York,—and lady is the right word,—who was formerly well-to-do but is now poor and a "shut-in," received a set as a present just before Christmas. An employee of the donor installed it for her. The first sound she heard was the notes of a violin solo, with an accompaniment. "It is the first music I have heard in years," she said, when it was ended. She had neither been physically able to go to a concert nor financially able to pay for a ticket. Marconi's greatest rewards are not in money.

OPERA IN THE UNITED STATES has always been an exotic thing, and the operas that Americans have written, being generally conscientious essays in a musical dialect that was better understood in Italy or Germany, have never aroused more than languid interest. But an opera recently produced at Chicago excited the audience to wild enthusiasm and an attempt on the part of the most temperamental hearers to pursue the composer and kiss him before his orchestra. Perhaps the reason was that the opera—*A Light From St. Agnes*—was written and scored in a new and distinctly American way. It was not a "jazz" opera, but it made use of the saxophone and other popular musical instruments, and its rhythms were often the syncopated, agitated, rhythms so common in present-day music. The work was not an imitation of Wagner or Verdi in Donizetti, at any rate; and the people of Chicago appreciated that fact.

THE MEN WHO LAY THE FOUNDATIONS

OUR American universities, though they have been excellent teaching institutions, have never offered the opportunities they should for research work in pure science. Our great manufacturing corporations, though they have encouraged invention and profitable application of scientific knowledge, have rarely thought it worth their while to pay chemists and physicists for doing scientific work that did not promise a fairly quick return in money. In both respects the United States has lagged far behind European countries, especially Germany. That is why Secretary Hoover, who is always awake to the opportunities of improving the scientific as well as the commercial methods of the country, has so much to say in public about the necessity of paying more attention to pure research.

Why is it so important to keep our cleverest scientific men busy in the pursuit of truth rather than on the problems of applying to industry the knowledge we already possess? For two reasons. First, the true scientific man works with infinitely greater zest when his aim is the discovery of new truth. He is rarely much interested in finding new ways to make more money. "When I am in my laboratory," said Pasteur, "I begin by shutting the door on materialism and spiritualism. I observe facts alone." That is the spirit of the genuine scientist. It is part of our duty as a nation to do our share in advancing human knowledge. Only by setting our scientists free to serve in that field can we fulfill that duty.

In the second place, all advance in applied science depends absolutely on a preliminary increase in our knowledge of pure science. The telegraph would never have been pos-



In the heart of the Great Smoky Mountains. It is proposed to establish a national park, the largest east of the Mississippi, among these mountains, which are on the border between North Carolina and Tennessee

THE VIRTUOUS VICTORIANS

By Edmund Gosse

IT is fashionable today to rail against the Victorian Age in life and literature, to charge it with arrogating all virtue to itself and with being, in the words of its most discarded prophet, "a portentous embodied sham."

In all this there is much exaggeration, but there is also some justice. Some of the genuinely virtuous Victorians made a very grave mistake in setting too high a value on doctrine. They were preachers, and they were never really happy unless they were spoiling the garden of existence by building a pulpit in it. Almost the only Victorian poet who does not preach is Robert Browning, and this may be the reason why he seems to sustain better than any of his fellows the inevitable wear and tear of time.

A sort of froward indignation with social habits which no one seriously thought of altering was one curious feature of Victorian ethics. Another, was the effort, not always to be, but merely to seem, virtuous, dignified and restrained. Out of this latter practice there arose the celebrated

malady called "hypocrisy." All this an ageing Victorian, conscious of the moral changes which have swept over England since his youth, is obliged to confess.

But wait. If we are inclined to laugh at certain absurdities, what does not rise in our memory to upbraid our ingratitude! It is no less easy to point to examples of a shining sincerity as to insist on instances of pride and false taste. The age which produced the noble simplicity of John Bright, the vigilance and energy of Dickens, the devotion of the Brownings, the savage virility of Carlyle, cannot be a decadent age. What will be the verdict when our critical successors apply a similar limelight to the present age? Every epoch has its faults, and so had the Victorian. It exaggerated, perhaps, the value of doctrine and the service of a superficial virtuousness. It preached too much. Well, if it did, what magnificent voices had the best of its preachers, and what a heritage of pure and lovely doctrine it has bequeathed to us if we will only profit by it!

sible if Oersted had not first made his experimental researches which disclosed the action of galvanic currents on magnets. The discovery of anaesthetics and antitoxines, the invention of the airplane, the development of wireless communication, all depended on laboratory experiments which were undertaken simply to find out the characteristics of certain gases, the laws that govern the movement of the atmosphere and the nature of the vibrations with which all space is filled. All of the wonderful applications of electricity to industry and our daily life are the outgrowth of work done by Faraday, Cavendish, Clerk Maxwell, Galvani, Arago and other scientific men, who were only interested in finding out all they could about the nature and behavior of the electrical force, and who pursued their labors with a devotion far greater than that of the experimenter who is trying to find a new way of making a profit out of his knowledge. It is only through the work of such men that we shall learn the new truths on which all

applied science must found its own fresh advances.

Fortunately, both universities and business men are coming to appreciate this fact. The opportunities for pure research are going to be much greater in the future than in the past, and we have every confidence that our scientific scholars will have the enthusiasm and the capacity to take full advantage of them.

AN INTELLECTUAL TRACK MEET

IN Maine, which, more than most states, has kept to simple, homely ways and the habit of retaining well-tried things until it is convinced that it has found better ones, four towns recently held a sort of intellectual track meet. Pupils from the public schools of four neighboring communities—Houlton, Bridgewater, Monticello and Island Falls—competed for a silver cup offered by the Aroostook Pioneer for excellence in the

"three R's," to be determined by a public contest.

There were six main events: First, a penmanship test, consisting of five minutes' copying from typewritten matter; second, a spelling test, in which the judges gave out fifty words, to be written; third, an arithmetic contest, containing twenty problems to be solved; fourth, a twenty-minute theme, on one of five subjects; fifth, a thousand-word spelling match; and finally, a public-speaking contest.

Interest throughout the four towns was as keen and as general as if the event had been a basketball or a hockey match, and the attendance was as large. Those who believe that modern education is superficial, and that the fundamentals are neglected, were present to see their contention proved. Those who think otherwise were just as confident that their faith would be vindicated. Both sides are probably of the same opinion still, for convictions concerning educational matters are not easily changed; but unbiased reports show that the young people made a creditable showing, and that everybody had a lot of fun.

Such contests might profitably be conducted elsewhere, especially in the North, in the winter months, when deep snow lays an embargo on many other diversions. Parents who seldom visit the schools that their children attend might thereby learn something of what the youngsters are doing and find therein an excellence no less commendable than skill in athletics.

But in the Maine contest one thing was missing that should not have been omitted: a period of exercises in "mental arithmetic." That was, and, such of it as the schools have kept, still is, the finest mental training ever devised. Those who do not believe it should get hold of some textbook of seventy-five years or more ago—say, that of Principal Adams of Dummer Academy, published in 1848—and try to solve, without setting pencil to paper, some of the problems there set forth:

"A boy playing at marbles first lost one third of what he had; he then doubled his number, when he had five more than he had at first; how many had he at first?"

"A builder went to a lumberyard to obtain an oak beam five inches thick and ten inches deep. The lumber merchant said: 'I have not such a stick; but I have two oak sticks of the right length and thickness, and seven inches deep. Placed side by side, the two will be stronger than one beam ten inches deep.' 'Not so strong,' said the builder. Which was right?"

When next you wish to test Johnny's reasoning powers ask him this: If a hen and a half lay an egg and a half in a day and a half, how long will it take thirty hens to lay twenty eggs? Or this: A brick weighs seven pounds and half a brick. How much does it weigh?

SPEECH AND THE RADIO

EVERY night some thousands of broadcasters are addressing several million listening Americans through the medium of the radio. What effect is it likely to have on speech? Robert Bridges, the English Poet Laureate, believes that it will be a purifying influence; that the necessity for clear enunciation in order to make themselves understood will cause speakers over the radio to exercise unusual care to pronounce every syllable distinctly; and that habitual listening to accurate speech will gradually influence all of us to imitate it. Perhaps he is right. At least he has raised an interesting question.

We have in America no such distinct dialects as there are in England, Scotland and Ireland, but we do have variations that are characteristic of different parts of the country. When you hear a man say, "I sorr 'im only yesterday," you know at once that he comes from New England. "Like I did" is Southern and Middle-Western. "Caow" and "haouse" come from below Mason and Dixon's line. "Boids" sing only in "Ne' Yoic," and the reduplicated *r* at the ends of words trills like a chorus of frogs from the Kankakee marshes and points westward. Can the radio ever standardize those variants or bring about a compromise among them?

Proper names offer another interesting

field. Shall Omaha end in a *ha*, or a *haw*? Shall Miami be pronounced in a way that suggests a caterwaul, or like the beginning of a speech by the German Kaiser, or in some way between? Is it Montana or Montanna? How many Americans know the proper quantity to give to the vowels in Nanaimo, and what syllable to accent, or how to pronounce Esquimalt, the Canadian naval base on Vancouver Island, or the name of Mount Ranier or the Willamette River? All those names have local forms, some of which seem to break such general rules as lexi-

cographers have been able to formulate; but it is the local pronunciation that must necessarily prevail, for, if a parent hasn't the right to call a child what he pleases, who has?

It may be that radio, by making one part of the country more familiar with the habits of speech of other parts, will have a useful standardizing effect on all; but we hope that the result can be attained with less tragic consequences than befell the Eastern college brakeman on the Nebraska railway who pronounced Beatrice in the Italian way rather than as a rhyme for mattress.

THIS BU WORLD

The Coal Question in Britain

The coal industry has its troubles in Great Britain as well as in these United States; only in Great Britain they are far more serious than they are here. The government is now paying a subsidy of almost \$100,000,000 a year to mines that cannot keep going and show a profit under the present conditions of high labor cost and diminished export demand for British coal. At the same time the miners will not hear of lower wages or longer hours, to bring the cost of English coal down to the German level, and will strike if any such way of dealing with the question is attempted. A government commission has just made a report recommending that the nation purchase and control the coal mines, but lease them out to private corporations for operation. It advises the higher-paid miners to take a somewhat lower wage in order to make it possible to avoid wide unemployment, and it thinks there must be some extension of working hours if the industry is not to be a permanent burden on the nation. There is no enthusiasm over the report in any quarter, and Great Britain approaches the first of May, when a decision of some sort must be reached, with much misgiving.

Stretching Their Wings

The airmen who are to attempt the exploration of the Polar ice this spring are all on the alert. Captain Wilkins has had misfortunes to his planes, but he has got one of them to Point Barrow and hopes to get under way presently. Commander Byrd is at Spitzbergen and means to "hop off" by May 15th. Captain Amundsen's dirigible "Norge" is completed, and may be in Spitzbergen by the time this paragraph is printed.

The Latest from China

It is now proposed that the Western powers shall take possession of Peking and declare it a neutralized area under foreign protection. It is easy enough to believe that that would be a good thing for the city, but the effect of such a step on the inflamed sensibilities of the Chinese people would probably be bad. They have already had about all the foreign interference with their affairs that they can stand. We do not expect to see Peking so occupied by foreign troops. Meanwhile things continue to go badly with General Feng. His army has been driven out of Tientsin, and Feng himself is said to be in Mongolia, on his way, perhaps, to Russia. Chang, the Mongolian dictator, and Wu, who controls Middle China, are at present acting in concert against Feng; whether their alliance will survive the rise of the question which of them shall succeed to the mastery of Peking is doubtful. But if the two men were unselfishly bent on restoring unity to China, they would now have a wonderful opportunity to do something worth while in that direction.

Railways and Railway Labor Get Together

The Railway Labor Board has not proved to be an institution popular with either the executives or the employees; both parties would be glad to see it done away with. Accordingly the representatives of the railway companies and of the railway workers' unions have agreed upon a system for settling any disputes that may arise between them. This system is outlined in a bill which

is already introduced into Congress; and if that bill is enacted the Railway Labor Board will no doubt be abolished. The new arrangement, which seems to have been adopted with singularly little difficulty, provides for (1) conferences between the parties to any dispute, (2) adjustment boards, created by the agreement itself, which may be individual, regional or national as the circumstances require. Boards of arbitration may be called in whenever the interested parties agree to do so, and there is to be a national board of mediation, appointed by the President and empowered to step in whenever earlier measures of conciliation fail.

Bridging the Hudson at Last

For almost three centuries after the white man came to what is now New York, the Hudson River flowed unexposed by bridges from Albany to the sea. Then the bridge at Poughkeepsie was built, and a year or two ago another bridge was thrown across at Bear Mountain. Now it is proposed to span the great river at the city of New York. The engineers of the Port Authority have planned an enormous suspension bridge to cross the Hudson from Fort Washington (179th Street) in New York to Fort Lee in New Jersey. The bridge will be carried on a single span 3500 feet long, by far the longest suspension span in the world. The towers from which the cables will be suspended are to be 650 feet high, nearly a hundred feet higher than the top of the Washington Monument. The roadway of the bridge will be 235 feet in the clear above the water of the river. It will carry automobile and foot traffic in four lanes, which can later be increased to eight; and tracks can be added, if needed, for street cars. The engineers say the monster bridge can be built for \$50,000,000.

One Country Really Disarming

Denmark is apparently seriously bent on disarming while other nations are merely playing with the idea. The Folkething, or House of Commons, has passed a bill which virtually abolishes both army and navy, except for police or coast-guard duty. The bill is a Socialist measure and met with such opposition that a majority of only four votes could be got for it.

Impeaching a Judge

It appears that we are to have the unusual spectacle of a judge of the United States courts put on trial before the Senate. The House Committee on the Judiciary voted to recommend the impeachment of George W. English, justice of the Eastern district of Illinois; the House agreed, and the Senate will sit as a court to hear the charges presented by members of the House appointed for that purpose. Judge English is accused of tyrannical disbarment of attorneys, improprieties in the handling of bankruptcies to the profit of his friends or relatives, and other irregularities which obstruct justice and bring discredit on the court. Impeachment cases are rare; only nine times since the Constitution was established has the Senate been called upon to exercise its authority in this way. Three judges of Federal courts have been found guilty and removed, after impeachment; three others have been acquitted. The most famous of impeachment trials was that of President Andrew Johnson in 1868. He was acquitted.

"He's the star pitcher on our team"—

"SAY, he's got a speedy curve that would make you cross-eyed. He could fan a Big Leaguer."

"He's almost the whole team, and one of the best liked fellows in High School."

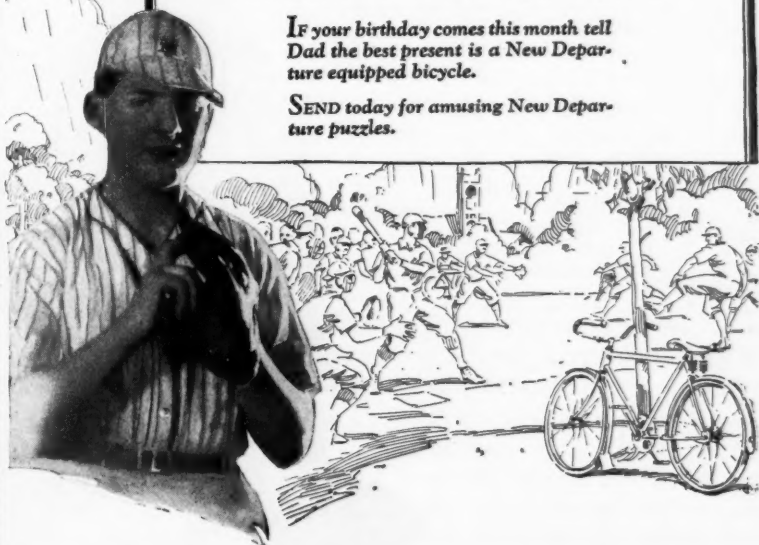
"And everywhere he goes he's riding his snappy new bicycle. It's a corker, with New Departure coaster brake, and everything."

Everywhere it's just the same. The regular fellows are the kind who know how much added fun and benefit a bicycle means. Get a bicycle just as soon as possible. And of course make sure it is equipped with a New Departure—the brake that has braking power of over half a ton.

NEW DEPARTURE MFG. CO., Bristol, Conn.

If your birthday comes this month tell Dad the best present is a New Departure equipped bicycle.

SEND today for amusing New Departure puzzles.



NEW DEPARTURE

THE BRAKE WITH THE MIGHTY GRIP

VIRGINIA FARMS

ON CHESAPEAKE AND OHIO RY.

Write for free booklet about fertile Virginia farms with improvements. Delightful climate. Livestock, trucking, general farming. Fast transportation at reasonable rates to nearby markets. Schools and churches excellent—good roads and taxes low.
K. T. CRAWLEY, Land Agent,
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The COLSON Co.
1255 Cedar St., Elyria, O. Catalog free

Ask your Storekeeper for **STOVINK** the red stove remedy.
Mfrs., Johnson's Laboratory, Inc., Worcester, Mass.

Let Cuticura Soap Keep Your Skin Fresh and Youthful

Sample Soap, Ointment, Talcum free. Address: Cuticura Laboratories, Dept. R, Malden, Mass.

Whooping Cough

Asthma, Spasmodic Croup, Bronchitis, Coughs, Influenza.

A household remedy avoiding drugs. Cresolene is vaporized at the bedside during the night. It has become in the past forty-six years the most widely used remedy for whooping cough and spasmodic croup. When children complain of sore throat or cough, use at once—

Vapo-Cresolene
Est. 1879

Send for descriptive booklet 82A

For Sale by Druggists

THE VAPO-CRESOLENE CO.
62 Cortlandt St., New York
or Leeming-Miles Bldg., Montreal, Canada

RAISE GUINEA PIGS FOR US

Clean, tiny pets, easy to raise in small space. Multiply rapidly; eat grain, hay, vegetable scraps. We supply breeders cheap and buy all you raise at top prices. Contract, price list, etc., FREE.
D. Breeders League, 4553 Davison Ave., St. Louis, Mo.

BOYS AND GIRLS FIRST AID WEEK

Under the Auspices of Bauer & Black
Chicago New York Toronto

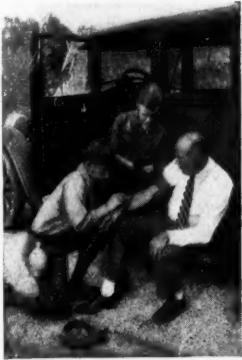
From MAY 1st

to MAY 8th



\$10,000.00 in Awards to the Boys and Girls who render the best First Aid Service in 1926 — See details on the opposite page

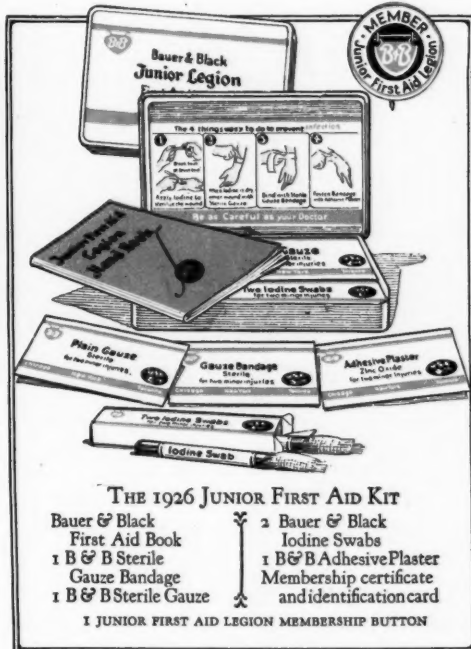
A Junior First Aid Kit for every Boy and Girl who joins the Junior First Aid Legion



Had it not been for Stanley Drexler and Sidney Buka, W. A. Hawley, of Denver, probably would have lost his life as the result of an automobile accident. An artery in Hawley's right arm was cut, but these two boys had learned their Junior First Aid lessons well. Stanley made a most efficient tourniquet of an ax-handle and a necktie, and stopped the blood-flow.



In a slide for home in a school boys' ball game, Harry Ober, of Brooklyn, N. Y., dislocated his arm, fractured his wrist and suffered deep cuts besides. But Philip Stein, on the opposing team, had his First Aid kit handy. He sterilized and bound up the wounds, and fearing broken bones, he improvised a splint by using a section folded of newspaper.



Jack Hoover, of Olathe, Kans., is only 13 years of age, but already he is credited with saving a human life, rescuing Frances Miller, 8 years old, from drowning. The little girl was wading in a pond, and stepped into water over her head. Jack swam to her, and grabbing her, succeeded in bringing her to shore where artificial respiration was applied.



William Dickerson, a nine-year-old boy of La Grange, Texas, owes his life to a ten-year-old playmate, Joseph Klatt Koss. While Dickerson was driving tent stakes, the hatchet slipped from his hand, struck his leg, and severed the main artery. In that emergency, the younger boy knew what to do. He improvised a tourniquet and checked the blood-flow.

Life membership only 12c. Enroll at the nearest drug store or send coupon. Bauer & Black will send you membership button, First Aid instructions and the new Junior First Aid Kit.

THIS is the first anniversary of The Junior First Aid Legion.

Born just a year ago, and dedicated to the service of the injured, it has grown into a mighty Knight Errantry of boys and girls, with a chapter in every community. The largest Order-of-Youth in the world!

And what a gallant Knight Errantry! A crusade against the ignorance and bravado that scorns the proper care of minor wounds. A crusade against the tragic aftermaths of accident.

In 1925, the Legion recorded hundreds of accident-instances where no doctor was within call, and the prompt, effective First Aid service of Legion members averted permanent injury and loss of life.

The Junior First Aid Legion is not a club. It has no imposing club houses scattered throughout the land. It is not a secret society, meeting in the woods or in one of those mysterious Lodge Halls on Main Street.

A National Fraternity of Service

It is simply a great national fraternity of boys and girls—without any officers, fancy titles, rules or passwords,—pledged, trained, and

equipped to help themselves and others, when accident comes and adult help is not available.

Every member is his own officer. He is a separate and independent chapter of the Legion in himself. The whole world is his meeting-place. And an accident is his call-to-order.

In 1925, the Legion schooled and trained a quota of boys and girls in nearly every city and town in practical emergency First Aid.

That was a big job—as much as the Legion could undertake in its first year.

Now comes the 1926 Roll Call

Now it is ready to take on new members—furnishing each with a pocket size packet of First Aid supplies and a course of fascinating lessons in First Aid, the same fascinating home-study lessons in First Aid it gave to its recruits last year.

Twelve cents makes any boy or girl a life member of the Junior First Aid Legion. There are no other dues or expenses of any kind. Every drug store in the land is a Recruiting Station—or enrollments may be sent direct to Bauer & Black.

Each new member will receive promptly, and postpaid, the new pocket size kit of First Aid supplies with the 1926 First Aid handbook, a handsome membership button and a membership certificate.

The 1926 call for recruits is limited to a definite quota for each town. If your son or daughter has not yet enrolled—get the enrollment in now. List of the winners in the 1925 contest will be mailed on request.

\$10,000 in Scholarships and Cash to the Juniors who perform the best First Aid in 1926.

Go today to the nearest druggist and place your enrollment (at 12c), which he will forward to Bauer & Black. By return mail you will receive the mighty attractive Junior First Aid Legion Outfit complete, postpaid. Or if you prefer, you may enroll direct by mailing the coupon below to Bauer & Black with 12c in stamps.

PLACE ENROLLMENT WITH YOUR DRUGGIST NOW!

(or, if you prefer, mail coupon below to Bauer & Black)

MEMBERSHIP COUPON

BAUER & BLACK, Chicago, Illinois*

I'd like to join the Junior First Aid Legion. Send full course First Aid instruction, Junior First Aid Kit, Membership Button, etc. I enclose 12c. Also please tell me how I can win one of the prize awards.

Name.....

Address.....

Town.....

Druggist's Name.....

*If in Canada address Bauer & Black, Limited, 96 Spadina Avenue, Toronto, Canada. (12)



THE ROCKAWAY HUNTING CLUB

Cedarhurst, Long Island

March 17th, 1926.

To the Editors,
The Youth's Companion.

Gentlemen:—I presented your letter in regard to the rules for Bicycle Polo at our Polo Committee meeting yesterday, and we were of one accord that the rules covering Bicycle Polo are the same as the regular Polo rules, the only difference is in the field, which should be one-half the regular size.

In my opinion you could not do a better thing for the game of Polo as a whole, and for boys owning bicycles, than by your articles on Bicycle Polo.

Yours very truly,
(signed) ALBERT FRANCKE



Forward stroke, "off" side



Back stroke, "off" side

THE scene is a large country club, on Long Island. A great many people are assembled on its broad piazza, which commands a clear view of the polo field. Several men who have played international polo for the United States are in the crowd, and there are many ladies, and boys and girls—all have come to see a championship polo game.

The big field, nearly three times as large as a football field, has been clipped and rolled to velvety smoothness. On this field all the famous polo players have played—Deveraux Milburn and Harry Payne Whitney, and Watson Webb and Tommy Hitchcock; and England's best men have played here, too—Barrett, and Lockett, and Traill, and the meteoric Luis Lacey, from the Argentine.

The crowd on the piazza knows polo—the hardest and fastest of all games. They will only applaud excellent play. All is ready for an important match—goal posts are in place, 150 yards apart, and a man on a polo pony is cantering to the center of the field. He is the umpire, and he has a new, glossy white ball in his hand. He blows his whistle for the players to come out.

And then, instead of men on polo ponies, eight young boys on bicycles come riding out on the field!

Each has a regulation polo mallet in his hand. How fast they ride! How far and high they hit the ball in practice! People who have never seen bicycles ridden, except on crowded streets, have no idea how fast they can go on a smooth, hard field. The captain of one team has thrown out a ball in front of him, rides hard after it, and hits it a clean, smacking stroke that makes it leap and roll for forty yards. There is tremendous power in a forward stroke delivered with the force of a hundred and twenty pound boy riding full speed on a bicycle. Three or four such hits will carry a ball the full length of the field. But while it is hopping along, another Red player overtakes it. He is hunched over his handle-bars. How his legs pump up and down! Now he straightens, and hits the ball a ringing backhand shot that stops it in full career, and sends it back to the captain. The umpire whistles again.

The teams line up, now. Their formation is like this:

	REDS			
	O	Back	O	
	O		O	
	No. 1	No. 2	No. 3	
UMPIRE	X	X	X	
	No. 1	No. 2	No. 3	
		Back		
		X		
	WHITES			

They wait, with one foot on the ground. Let us look them over for a minute, while the umpire gets into position to start play by rolling the ball between the two forward

lines. The boys are all about thirteen years old. The captain of each team is playing back, about ten or twelve yards behind his forward line.

No. 1 on the Red team, Bob Smith, is the fastest rider on his side. He will keep well ahead, when his team is attacking, and cover the White back, and make his life miserable. Naturally, he can't charge into him, or "cross" his line in dangerous fashion, or push him off with his hand. But Bob Smith, like every good No. 1 in regulation polo, can block the opposing back, and take the ball away from him, and will have many a chance to score goals. But the real sharp-shooter on the Red team is No. 2, Sam Jones. He has the straightest shots, and is a fast rider also; the ball will be "fed up to him" by his No. 3 and his back, and he will lead the scoring for his team. No. 3, Ned Brown, is going to keep close to the ball all the time on the defense, but be ready to feed the ball up to No. 1 and No. 2. This is the position for the most careful boy on the team.

The heaviest burdens, however, fall on the No. 4 player—the back. As Mr. W. Cameron Forbes says in his book, "As to Polo," "his job is not a spectacular one—it is a safe one. But the most brilliant backs I have known are those who, when a chance came for a rush, rode crashing through at high speed, being better able to get up speed because fresher." Back's main duty is to stay well back of the ball, between it and his

own goal, and to turn the ball back whenever it gets started toward his goal and passes No. 2 and No. 3.

Now the game is starting. The umpire has rolled the ball between the opposing forward lines, who are close together. There is a flurry of mallets; Bob Smith is bumped into; his foot goes down to save him from a fall. You can't see the ball for a second; everybody is hacking at it. But now Ned Brown has hit it forward, twenty yards toward the White goal. Every boy turns and rides after it. Just before it reaches the White back, Ned hits it forward again. It is past the Back, and now the White goal is in serious danger. Their back is flying along, a little ahead of Ned Brown; he is going to stop the ball if he can with one of those beautiful back strokes, on

the "off" or forehand side, which are the prettiest strokes in polo. But he misses; and now Bob Smith, Red No. 1, is alongside him, and "riding him out," something in the manner of football interference.

Mr. Allan Forbes, one of the pioneer bicycle polo players, advocates abolition of the "riding out" rule, saying that the game is faster without it, and freer from spills.

See, now, Bob Smith has forced the White back out of the way; and Jones is still technically "in possession" of the ball, and is rapidly nearing the undefended White goal. His particular opponent, the White No. 3, is catching up to him; but Jones keeps



Philip Lynch, playing at Rockaway Hunting Club



Six players at San Antonio, Texas. Regulation mallets would improve their game

The Youth's Companion Official Rules for Bicycle Polo

This is an excerpt from the official 1925 rules of the United States Polo Association, revised especially for the conduct of bicycle polo.

GENERAL RULES

- Ground**
1—(a) A full sized ground should not exceed 150 by 100 yards.
(b) Goals to be twelve feet wide.

- Balls**
2— The size of the balls shall not exceed 3 1/4 inches, and the weight of the ball shall not exceed 5 1/2 ounces.

- Maximum Duration of Play**
3—(a) The maximum duration of play in a match shall be not longer than 6 periods of 5 minutes each, with intervals of 3 minutes after each period.
(b) Each period of play shall terminate as soon as the ball goes out of play after the expiration of the prescribed time.

FIELD RULES

- Ends Changed**
1— Ends shall be changed after every goal, or if no goals have been obtained, after half-time.

- Ball Hit Behind by Attacking Side**
2— If the ball be hit behind the back line by one of the attacking side, it shall be hit off without delay from where it crossed the line, but at least six feet from the goal posts, after giving the attacking side ample time to get to the 15 yard line. None of the attacking side shall be within 15 yards of back line when ball is hit.

Ball Thrown in By Umpire

- 3— When the ball is hit out it must be thrown into the ground by the Umpire from the exact spot where it went out. No player to stand within 5 yards of the side lines.

Riding Out Antagonist

- 4—(a) A player may ride out an antagonist, or interpose his bicycle before his antagonist, so as to prevent the latter reaching the ball, but he may not cross another player in possession of the ball, except at such distance that the said player shall not be compelled to check his bicycle to avoid a collision.

Possessor of Ball Given Way To

- (b) If two players are riding from different directions to hit the ball and a dangerous collision appears probable, then the player in possession of the ball must be given way to.

Dismounted Player

- 5— No player is allowed to hit the ball or interfere in the game if he is dismounted from his bicycle, or if one foot is resting on the ground.

In this brief summary, we have not mentioned penalties, which range from giving a full goal and ruling the offending player off the field, to a free hit by the side fouled. In the case of a free hit, the penalized team must stand 15 yards from the ball, and give the fouled team an opportunity to hit the ball without interference.

To secure a complete set of the Rules for Bicycle Polo, send 10 cents to the Sports Editor, The Youth's Companion, 8 Arlington Street, Boston, Mass.

AMERICAN SPORTS PUBLISHING COMPANY

45 Rose Street, New York

March 6, 1926.

To the Editors,
The Youth's Companion.

Gentlemen:—A. G. Spalding & Bros. carry mallets for Bicycle Polo, which are the regulation implements cut down in length, at \$3 each. The regulation balls are \$4 a dozen. Stores that carry Spalding goods will supply catalogue and also bicycle folders, on request. Your interest in Bicycle Polo is much appreciated, and I am sure that The Youth's Companion will stimulate activity in this sport that is increasing in popularity everywhere.

Faithfully yours,
(signed) JOHN T. DOYLE
President



Forward stroke, "nigh" side



Back stroke, "nigh" side

cool, finds a last ounce of energy somewhere in his legs, and scores a goal with a clean, ringing drive which you can hear all over the grounds. The man with the flag waves it vigorously, and there is a lot of applause from the spectators.

But when they line up again, the Whites have braced up, and their back is not going to miss so badly again. The ball goes all over the field, until the White No. 2 gets it and carries it down toward the Red goal. Just in the mouth of the goal he misses; but his own No. 3 is right behind it, and gives it a firm, accurate hit which sends it between the posts.

"This is wonderful," says an old-time player on the piazza. "I had no idea that boys on bicycles could play so fast and so accurately."

"They are grim death on the rules, too," says his companion. "If there is any crossing or intentional fouling, they know it like a flash. They play polo a lot better than most men do, except the stars. But this bicycle game will make stars out of boys; no boy can excel at it unless he is strong, and in good condition, and has a keen eye. These boys playing here will be among the best men in regulation polo ten years from now."

With this prophecy in mind, let us watch the rest of the game in peace, and point out some of the necessary strokes to practice most. Polo is a game that requires intense practice; every afternoon, whether you play on a pony or a bicycle, take out a ball and knock it around, striving for as much form and accuracy as you need in golf. The harder the ground the better.

There are four main strokes. The right-hand side of your bicycle (or pony) is the "off" or forehand side. The other is the "nigh" or backhand side. So you have a forward stroke on the off side, a back stroke on the off side, and corresponding strokes on the nigh side. The latter, you will soon find, are the hardest. Beginners are apt to hit too late, and therefore fail to get distance. You do not need great strength; raise the mallet high and hit with a full sweep, carrying through as in golf. It is best, say Mr. Forbes and other authorities, to practice until you are sure you are hitting with the exact center of your stick—where the shaft intersects the head. Of course you hit with the side of the mallet, not with the end.

Waste as little time and strength as possible playing across the field, when attacking. Hit the ball straight for the opponents' goal. On the defense, especially near your own goal, play the ball to the side away from the goal, never directly out in front of it.

If you break your bicycle or mallet, go to the sidelines at once and get another one. The game will not halt in your absence.

A hint on condition: No late hours, not much pie and pastry, plenty of water and vegetables, long road rides to strengthen legs and lungs between games and practices.

Further particulars will be in later issues.

Graphology

This is what I promised you week before last. Ask me any questions you like. Don't forget the stamped, self-addressed envelope. H. G.

IF the writing strikes you right off as being very "different," it is safe to say that the person who wrote it is the sort of person that people call different. She does things her own way, wears her clothes in an individual manner, has original ideas about parties and does things generally according to her own style. Such people usually have rather strong personalities and are often striking-looking.

No doubt you have been thinking all along about the way you make a *d* or an *m* or an *o* and have been wondering why I have said nothing about it so far.

Individual Letters That is what we are coming to now. And it is also very important. Letters *a*, *o*, *d*, *g* closed at the top mean a noncommittal individual, one who keeps things to herself. When these letters are open at the top, it denotes just the opposite—a frank, candid nature. Letters *e* and *r* rising higher than they should rise, so that they give you the impression of looking down on the other letters, mean conceit and pride.

Cannot keep secrets

a few days

Discreet and noncommittal

Ma Charles

If the letter *d* is made with a small backward curl,—known as the "literary" *d*,—it denotes talent, culture, refinement, literary taste and often ability.

Writing of a very literary person

Faithfully yours

Christopher Morley

N shaped like *u* generally denotes kindness. When *g* and *y* loops tend to be rather long and large, they mean fond of the outdoors and often very athletic. If they are exaggerated long and large, they mean confused mental processes; and if they tend to be mixed up with the lines above and below, they are a very bad sign, often leading to insanity.

When the letters *a*, *o*, *g* and *d* are open at the bottom, it denotes hypocrisy. This is one of the graphological signs that are supposed to be absolutely sure, and I myself have never known it to fail. I would not trust such a person out of my sight. And my advice to you is, "Look out for them."

T is a very important letter, graphologically speaking, and I wish that I could go into it more thoroughly instead of simply saying that a wavy *t* cross usually means a good sense of humor and jolly personality.

When letters look like musical notes or symbols, they denote a person who is inclined toward music and often musical ability. If letters look like printed letters, they denote artistic instinct and in general artistic ability.

Artistic ability

Dear Harris

Last we take up the most important thing of all—signatures. Your signature expresses your real personality better and more surely than anything else you can write, because you write it more unconsciously than anything else. Are you cautious? Then you follow the signing of your name with a sharp dot. Do you use a vertical flourish somewhere near your name? Then you are independent and have a strong character. You are apt to care very little for what people may think of you.

If you sign your name with a great flourish, it may mean that you have remarkable ability, or it may mean that you want very

much to be appreciated. If your flourish is above your signature, it means that you are a vain and conceited person and sometimes that you have an over-developed imagination and mental exaggeration.

Wavy bends beneath the signature indicate a sense of humor and wit. If you do not follow your signature with any dot at all, it often means that you are trustful of others, sometimes that you are really too trustful. A clever salesman might sell you wildcat stock without much difficulty. Many people say that this is a sure rule, but I have found many exceptions to it.

Everything that I have said about handwriting in general applies to signatures, too, only in signatures its significance is much increased.

Thick, heavy writing denotes a firm and diligent personality. Such people are not easily swayed by this and that. If the writing is shaded, it signifies an eccentric, energetic and somewhat affectionate person.

A good example of shaded writing

I don't think they will have to and with I am, off

Whenever the writing is smeary-looking, blurred or ugly and ungraceful, you may be sure that the hand that guided the pen belonged to a coarse or vulgar nature, sensual and often mean.

You have probably noticed that some people write a great deal faster than others. It may be because they think faster, are in more of a rush than others, or have more to do. Speedily written writing generally indicates fluency of thought and great activity of mind. Most professional men write very quickly. When every letter is carefully made, it denotes precision. Slow and indolent writing denotes indolent people, fond of sleep and altogether rather lazy. Sometimes it is hard to tell very rapid writing from very slow writing.

Writing shows fluency of thought

Resinol
(Governor-General)

The general style of the specimen of writing that you have before you is one of the most important of all character indications.

General Style Learn to look at the general appearance and get a general impression of the writing before you actually make any analysis of the detail. This is always a good plan if the writing is perfect and looks as if it might be used to go in a copy book; it means the sort of person who has no real strength of character, no independence. It means one who serves.

One of the very nicest things about graphology is that as soon as you learn the first lesson you can begin applying it. There is no "waiting to complete the subject" sort of thing, for if you waited for that you would never start practicing. And there's the other nice thing about it. You never complete it, but are forever learning more and more. Each specimen of handwriting in the world has something to teach you, no matter how much of an expert you are; and if you go into the study of it without realizing this, you will never become much of an expert.

Perhaps you will become seriously interested in graphology, as so many of the rest of us have. Perhaps you will want to go into the subject in a less superficial way than has been necessary in this brief article. If you do, let me help you get hold of the right books. Write to me about the difficulties you get into, and I will try to help you straighten them out. And when you need encouragement, if you ever do, I may be able to help you out there. Anyway, I wish you well!

IVER JOHNSON BICYCLES

Take the first step toward owning an Iver Johnson

If you have not as yet experienced the thrill of owning an Iver Johnson write at once for interesting Catalog "B" which shows each of the Iver Johnson models and gives the kind of information that will help you get Dad to loosen up the pocketbook.



Are you one of these
Happy Iver Johnson Boys?

EVERY boy knows the Iver Johnson bicycle. The same famous bicycle your father rode when he was a boy.

High carbon seamless steel tubing is used in the frame and fork. The two-piece crank set and the two point ball bearings reduce friction. Pedaling as

easy as walking. Vital parts drop-forged. Five coats of enamel baked on—then hand-rubbed. All the nickel plating done over copper. Color choice of Blue, Maroon or Black with Duco finished white head. Enamel especially made for Iver Johnson. Guaranteed equipment.

IVER JOHNSON'S ARMS & CYCLE WORKS
21 River St., Fitchburg, Mass.; New York, 151 Chambers St.
Chicago, 108 W. Lake St.; San Francisco, 717 Market St.

CHAFING and RASHES promptly relieved and healed by a few applications of
Resinol



GIVEN For A Few Minutes' Work

Take a camera with you this summer and carry home the loveliest, funniest, and most interesting parts of your vacation. It's easy for anyone to get good pictures with the Hawkeye, because it requires no focusing or estimating of distance. Has a carefully tested lens and reliable shutter always ready for snapshots. Is Eastman-made. Takes pictures $2\frac{1}{2} \times 3\frac{1}{4}$ inches. Complete instructions included.

OUR OFFER

The Camera will be given to any Companion subscriber for one new yearly subscription and 40 cents extra. (Subscription also counts in Aeroplane Race, see page 337). Or, the Camera will be sold for \$1.50 postpaid.

THE YOUTH'S COMPANION
8 Arlington St. Boston, Mass.

\$1900 A YEAR TO COMMENCE

Railway Mail Clerks On runs 3 days on—3 days off—full pay. Travel—see your country. Common education sufficient. Every boy or man 17 up should write immediately for free list U. S. Government positions now open and free pointers on how to get a position. FRANKLIN INSTITUTE, Dept. 5225, Rochester, N. Y.

THE HAYES METHOD FOR ASTHMA AND HAY-FEVER

The Recognized Standard of Successful Treatment

For particulars of the Hayes Method which is administered in your own home without interrupting your daily work or duties, address F. HAROLD HAYES, M.D., Buffalo, N. Y., asking for Bulletin Y-251. Special attention to children.

Time to Think about Camps

Choose Your Camp NOW

BOYS' Camps	SALT WATER Camps
CRUISING Camps	GIRLS' Camps
MECHANICAL Camps	TUTORING Camps
Camps emphasizing Manual Training	COEDUCATIONAL Camps
RANCH Camps	NORMAL TRAINING Camps

Summer Courses: ELECTRICITY, BUSINESS ADMINISTRATION, INTERIOR DECORATING

Special Courses: ART, MUSIC, DANCING

(Cut this out)

THE YOUTH'S COMPANION
8 Arlington Street Boston, Mass.

I would like to have information about

type of camp, named above. I would like a camp for boys/girls located in _____ state. My age is _____. Will you kindly send me information.

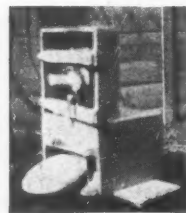
Name _____ Address _____

To secure this Membership Button, the first step is to use the coupon below.



22nd Weekly \$5.00 Award

To Associate Member Elbert Miller (16) of 63 Cooper Street, Brooklyn, N. Y., goes the 22nd Weekly \$5.00 Award (carrying with it, under new provision, automatic promotion to the grade of Member) for the design and construction of an Automatic Animal Feeder. Says Member Miller, "As my mother and I are not at home at lunch time, our cat had to take two meals in one. To remedy this I thought up and made this animal feeder." Member Miller supplements his photographs with an excellent diagram of the apparatus. The basic part is an alarm clock, the dial of which is visible at the back of the machine. A drum is attached to the shaft of the alarm spring, and on release of the alarm this drum unwinds a cord, which lowers one end of a hinged platform to an angle of about 30 degrees with the horizontal—beyond the "angle of repose" of a dish of food for the cat. The dish then slides down to the delivery platform of the machine in the position shown, and is available for the cat at the precise time Member Miller wishes it to be.



This use of the "energy of configuration" in a wound clock spring is ingenious, and illustrates an idea which may be widely used. What other Lab Member can suggest a new application of Member Miller's principle?

Proceedings

Experimental Lab, Wollaston, Mass.

March 22:

Built a scooter from design by Associate Member Donald Herrera (14), of Randallstown, Md., and went out to find a pond. It worked—the propeller, driving it several feet.

Tried to make a pattern for the torpedo stern of Cinderella. After three hours of trying to make a sheet of paper behave while wrapped around a car's tail about five feet long, we postponed operations till tomorrow.

March 23:

Painted the scooter a nice gray. The pontoons are covered with shellacked cloth; they look like miniature racing shells.

Made a seat for Cinderella; that is, we cut out the board and put the springs on it with wire, staples and twine. It had to be lower than the regulation Ford seat, so the old springs wouldn't do. Now for the leather and stuffing.

Made a few temporary ribs out of sheet iron and nailed them on Cinderella's torpedo. The paper buckled again in places and it looked as if our pattern was destined to failure. However, we decided to risk a piece of sheet steel and marked around the rough pattern, with allowances. Then we lifted the big sheet on to the car. Steel behaves much better than paper; we'll say that. With the exception of one little buckle it's great. We can take that out with a little coxing. Assembled a radiator cap with wings. Handsome. The goose-neck is finished and nicked. We are coming down the home stretch now on this long job.

March 27:

Mr. and Mrs. Ellery Sedgwick of Boston visited the Lab at 4 p. m. and brought their son Cabot, who "sat" for a life mask. Sitting isn't the right word exactly; you lie on your back. He was our first customer; a few more, at \$25 per mask, and we will be getting up in the world.

Membership Coupon

For the use of any boy, anywhere, who wishes to join the Y. C. Lab.

The Director, Y. C. Lab
8 Arlington Street, Boston, Mass.

I am a boy years of age, and am interested in creative and constructive work. Send me full particulars and an application blank on which I may submit my name for Associate Membership in the Y. C. Lab.

Name.....
Address.....

THE Y. C. LAB

The National Society for Ingenious Boys



Here are Members Sawyer and Emery making mallets at the Y. C. Wollaston Experimental Laboratory. Sawyer is on its staff, while Emery (who lives many miles away) dropped in for a visit and went to work. Come in when you can. The address is 33 Prospect Avenue, Wollaston, Mass., and every Member, Associate or Applicant is privileged to call.

We Now Make Polo Mallets

THE game of polo is played with very simple implements. Every boy has or should have a bicycle; and bicycle polo is the best way to learn regulation polo, besides being a first-rate game itself. After the bicycle, the only other implements are mallets and balls, and wooden goal posts.

Use regulation mallets and balls if you can get them. They can be ordered at most sporting-goods stores, and cost about the same as fairly good golf clubs and balls. If you live near a place where regulation polo is played, and this means most cavalry posts, as well as country clubs, and an increasing number of colleges,—you can get mallets and balls for practically nothing, second hand. You cannot make the balls, unless you have the right wood and are a master hand at a turning lathe; in fact, we didn't even try to make balls at Wollaston. Practice with any other ball is almost useless. Tennis balls are too light, golf balls too small, baseballs are the wrong size and too heavy, and croquet balls will break your mallet. But you will have no trouble at all in making a good mallet—we made them quickly and easily.

Remember that it is always easier to copy something than to make it from a printed description. Get a regulation mallet, cut down the shaft a few inches (determine this by experiment, mounted on your bicycle), rewind the hand grip, and you will learn practically everything there is to know about it. But if you can't do this, here is how you can make a mallet yourself.

For the shaft, use hickory by choice, then

ash, then bamboo. Our best mallet has a hickory shaft, cut down from a hoe handle. The shaft is about 39 inches long, tapered from $\frac{3}{4}$ to $\frac{5}{8}$ inches. Make the head of maple or oak (turning it in a lathe is easy, whittling is slower), $9\frac{1}{2}$ inches long, and $1\frac{1}{4}$ inches diameter in the center, tapered to $1\frac{1}{8}$ inches at ends. Then bore a $\frac{5}{8}$ -inch hole through the head, at an angle of 70 degrees. Make a $1\frac{1}{4}$ -inch slot in the end of the shaft, cut a wedge to fit it, soak the end of the shaft in waterproof glue (LePage's is good) and drive it firmly into the head, fastening it with the wedge also well soaked in glue. If the work is neatly done, this will hold well and not slip. Wind the shaft with linen fish line for five inches above the head. Finish shaft and winding with shellac.

Then make a hand grip of half-round



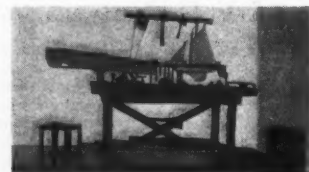
Construction of grip

wood, gouging its side to fit tightly over the shaft. This grip tapers from about one inch at the top to nothing at the bottom. Tack it to the shaft, and then bind tightly with tire tape; finish with a strip of chamois, $2\frac{1}{4}$ inches wide, over the tape. Bind in a strap or loop of calfskin, or lamp wick if you can get it, 30 inches long. This is looped over your wrist when in play.

If you use a bamboo shaft, wedge it into the head with a dowel. If the bamboo splits, the winding will hold it. Bamboo shafts are light and whippy, but not so durable as hickory or ash.

HARRY IRVING SHUMWAY
Councilor, Y. C. Lab.

Two Special Cash Awards



THE stout workbench was entirely built by Associate Member (now Member) Robert R. Vennum (15) of 2605 Franklin St., Wilmington, Delaware, and together with his tool rack it gives him excellent facilities for work. Note the firm bracing of the legs.

The large block in the vise is the beginning of a model power boat, about which we expect to hear shortly.

INGENUITY, the great ability for "succeeding with what you have," marks the work of Associate Member (now Member) Lucius F.



Clark (14) of Route 2, Lamoille, Minn. The scale of his model army truck and caterpillar tractor can scarcely be appreciated in the photograph. The truck is blue, and the covering is brown duck, bent on to a framework made from bicycle spokes, sharply bowed. The radiator is made from the top of a cocoa tin. The radiator cap was the top of a tooth-paste tube. If you would like a copy of Member Clark's directions for making these models, ask the Director.

When sending any communication to the Y. C. Lab that requires an answer, inclose a stamped, self-addressed envelope.



Our Members and Associate Members are wearing their buttons and ribbons in this way. To join the Y. C. Lab, use the coupon below.

Answers

THIS service, among the greatest of all the advantages offered by the Y. C. Lab, is now strictly limited to Members, Associates and Applicants. They may ask any scientific or mechanical question for reply, free of charge, by the Y. C. Lab Councilor best fitted to answer. Inclose a stamped, self-addressed envelope, and your reply will come by mail. Only a small fraction of the hundreds of thoughtful, interesting questions we receive each week are printed from time to time in this column.

A Speed Boat from a Pontoon

"I have the idea of putting a four-cylinder motorcycle engine into a single pontoon, 18 feet long, which was used with a seaplane. I do not know if the vibration caused from the high speed of the motor will cause it to be unsafe. Are wood or duralumin air propellers cheapest and most efficient? How large would it be necessary to have a propeller for a Henderson 4-cylinder 12-15 h.p. motorcycle engine, and how many revolutions would be necessary? Do you personally think there would be enough power?"—E. P. Hempstead, Providence, R. I.

Answer by Mr. Magoun: Pontoons depend upon the lift of the wing of the seaplane to get them out of the water. They thus have insufficient beam to "plane," even when plowing through the water at twenty knots. Your experiment has been tried at Pensacola by the Navy, in a test on an N-9 seaplane float, with results as above. Is your float a standard Navy type?

Duralumin is four or five per cent more efficient than a wooden propeller, but much more expensive. Wooden propellers cost \$50 to \$60; duralumin from \$100 to \$600. It is impossible with the data given to recommend a propeller to you. In order to decide the pitch, diameter, revolutions, etc., it will be necessary to have a power curve for your motor, and we ought also to know the total weight of equipment put on the float, including engine, pilot, etc. To study the subject for yourself, write to the National Advisory Committee on Aeronautics at Washington, D. C., for their report No. 14. This report, written by Doctor Durand, gives complete information concerning the design and selection of propellers.

It is my opinion that, although you would have considerable fun with a pontoon, your success and safety would be considerably greater with a type of craft more nearly resembling a sea-sled.

"I would like to ask the Y. C. Lab the easiest way to compute the horse power of a water wheel."—C. O. Randall, Snowmass, Colo.

Answer by Mr. Young: I assume the water is delivered by means of a pipe, not a canal. If so, multiply the height of the reservoir above the wheel in feet by the quantity of water, in pounds, delivered to the wheel in one second. Divide the result by 678. This is the horse power, assuming that the efficiency of the wheel is 83 per cent. If the wheel you have in mind has water delivered to it by a canal, send me a rough sketch and I will tell you how to compute its power.

"Where can I get description and plans for a galleon of the Santa Maria type, model to be about two feet long?"—Louis Schneider, South Natick, Mass.

Answer by Mr. Magoun: I am sending you the only blue print we have available at the present time. There is in preparation a drawing more nearly the size you ask for. When this is available, you shall have a copy. The price will be about fifty cents.

The Secretary's Notes

WHO would think, after the publication of all the new Associate Members' names last week, that twice as many new ones have been elected since that page went to press? But so it is. The Y. C. Lab fills a need not fully covered by any other society in the world—it is the first permanent association of boys and men, drawn together from all over America, and from foreign countries too, by a common love of science.

Announcement of the Second Quarterly Award of \$100.00 will be made on this page next week. The competition was very close. The Director and Councilors spent many hours in the M. I. T. and Wollaston laboratories, testing and comparing the projects for this, our second large award.

Announcement of the much more valuable Annual Award, and of the qualifications necessary to win it, will be made soon.

More than fifty Associates, all over America, have now qualified for promotion to full membership, and are receiving Certificates.

The Boys Who Made Radio—I

The first of six chapters, to appear every other week, telling about the greatest romance in scientific history.

MARCONI
By EARLE REEVES

WISE old Ben Franklin knew about wireless. That is, he experimented at sending electrical impulses through the air.

Professor Morse invented the amazing electric telegraph and in 1844 sent messages under water, without wires.

Nearly a half century passed, and in the eighties Thomas Edison made an electric signal hop from the roof of a railroad train to wires strung along the track.

Three times America almost gave the world the great discovery.

With mathematics—this sounds strange—a British professor proved that electrical waves existed; but he never caught one or played with it in a laboratory.

Then a German scientist proved it with batteries and coils of wire, so that the name "Hertzian wave" was given to this astounding thing that was so fast it could zip around the earth eight times in a single second.

But the rest of the world even then—in 1887—might well have said, "Well, what of it?" For no one saw anything useful in all this.

No one, that is, except a boy.

One may say, perhaps, that it was "written in the stars" that boys were to make radio. The men mentioned above who almost discovered it were most of them old men—Edison, the "boy" of the lot, was 35 when he made his test, while the experiments of boys have given us radio, or wireless, and advanced it step by step toward perfection.

The boy who first saw something useful in this invisible force was, of course, Marconi.

He was born at Villa Griffone, near Bologna, Italy, April 25, 1874. His mother was an Irish woman—a Jameson of Dublin, where to be a Jameson is to be somebody. So it happened that the boy grew up about half Guglielmo and half William. He spoke English as naturally and easily as Italian.

He was sent to school in Bedford and later to historic Rugby.

He returned to Italy to study, and he found there two professors who encouraged his love of science and who helped him most. They were Professor Rosa, of Leghorn, and Professor Righi, of Bologna University.

At sixteen Marconi began his life work. He began by erecting poles in his father's garden. Bit by bit, over a period of five years, he literally "put wireless together." It did not work out all at once, a flash of genius. The poles were moved here and there. They were made higher. They were set farther and farther apart. His sending apparatus was increased in strength. The antenna he attached to a "ground wire" and increased sending power many times. His receiving instrument he perfected, making it more sensitive. He proved that a hill of stone did not stop his "messages."

And when he was twenty-one he had



"Half Guglielmo, half William"

With glowing threads for chains, these men have captured the world in a box and laid it on your table.

telegraphed one mile through the air without the help of wires.

Before he was twenty-two young Marconi had departed for London. The chief engineer of the postal department—which in England operates telegraph and telephones—listened to his story. The apparatus was set up on the roof of the General Post Office. It sent signals a hundred yards. Famous men of England looked on in amazement.

Later he telegraphed nine miles, across Bristol Channel and was summoned by the King of

Italy to demonstrate his miracle. Soon afterward the King conferred knighthood upon him: this before he was twenty-three.

The young inventor moved in a realm, almost, of romance.

While many scoffed at his invention and saw a hundred reasons why it could not work practically, he moved from triumph to triumph, winning tribute from scientists and decorations from the royal houses.

But Marconi was still as quiet as he had been when a schoolboy. He slipped off to America, saying merely that he was making some experiments at sea, where messages could now be sent and received up to a distance of three hundred miles. But he was out for bigger game.

In a room in the old barracks on Signal Hill, three hundred feet above the bay and opposite St. Johns, Newfoundland, Marconi set up his receiving set. Buffeted alternately by winds and snow and smothered in dense fog, Marconi and his assistants struggled to send aloft a nine-foot kite and lost it; sent up a fourteen-foot hydrogen balloon and watched it torn from its mooring wire; successfully flew a second kite which held aloft a four-hundred-foot antenna wire; and then, while one assistant watched, Marconi and the others went inside the barracks.

Shortly after noon on December 12, 1901, Marconi removed the headphones, handed them to his assistant and said quietly:

"See if you can hear anything, Mr. Kemp."

The assistant heard distinctly three dots, the letter S, a prearranged signal.

The Atlantic had been spanned!

Tuning was his second great contribution. A third was the direction-finder. An instrument smaller than many radio sets, it guided the Spanish fliers to South America recently and is a part of the Amundsen North Pole flight expedition equipment.

Marconi reaped a rich cash reward almost from the beginning—but he remained a scientist. He has three homes today, and three private laboratories. One workshop is in England, another is in Italy, and a third is on his yacht, *Electra*. He divides his time almost equally among the three.

He may yet surprise us again.

(In May 13 issue—Powel Crosley)



Trains Unruly Hair — to Stay Neatly Combed

If your hair is difficult to keep in place, or lacks natural gloss and lustre, it is very easy to give it that rich, glossy, refined and orderly appearance, so essential to well-groomed boys.

Just rub a little Glostora through your hair once or twice a week, or after shampooing, and your hair will then stay, each day, just as you comb it.

Glostora softens the hair and makes it

pliable. Then, even stubborn hair will stay in place of its own accord.

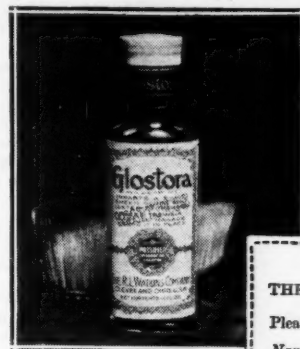
It gives your hair that natural, rich, well-groomed effect, instead of leaving it stiff and artificial looking as waxy pastes and creams do. Glostora also keeps the scalp soft, and the hair healthy by restoring the natural oils from which the hair derives its health, life, gloss and lustre.

Try it! See how easy it is to keep your hair combed any style you like, whether parted on the side, in the center, or brushed straight back.

If you want your hair to lie down particularly smooth and tight, after applying Glostora, simply moisten your hair with water before brushing it.

A large bottle of Glostora costs but a trifle at any drug store.

A generous sample FREE upon request.



A large bottle of Glostora costs but a trifle at any drug store.

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1276 West 3rd Street, Cleveland, Ohio

Please send me FREE, a sample of GLOSTORA, all charges paid.

Name.....

Address.....

In Canada address
THE R. L. WATKINS CO., 402 Wellington St., West, Toronto 2-Ont.

Boys Earn This Fine Air Rifle

Take a shot, boys! How many times can you hit the bull's eye? It's not easy, but a little practice each day with a Companion Air Rifle will bring surprising results.

It's great fun, and think how proud you'll be as your target score leaps up. Get busy now and earn this fine little Rifle — steel barrel and carefully adjusted sights. Five Practice Targets included free.



For the Young Sharpshooter

Given Free

To any Companion subscriber for securing one new yearly subscription. (Subscription also counts in Aeroplane Race, see page 337). Or Air Rifle sold for \$1.00 postpaid.

THE YOUTH'S COMPANION
8 Arlington St. Boston, Mass.

A Call to Christian Fathers and Mothers

Customer — Have you got a copy of "Untrue Revelations" or "Insulting Stories?" Drug Clerk — No, Miss, but we have something just as bad.

This extract from the "funny" columns will provoke many a smile, and yet it reminds us of a situation that is anything but humorous. The circulation of trashy story magazines now runs into millions of copies every month. Beyond all shadow of a doubt this flood of reading sewage is undermining the morality of our young people, increasing crime and making a jest of the sacred ideals of honor, virtue, marriage and life itself. Isn't it about time for the Christian people of our land to do something to combat the polluting power of prostituted printing? Unless the forty million church members of this country are going to stand by the religious press in this fight for decency, this fight for the home, where then shall it look for subscriptions and support?

Christian Herald is read and loved in nearly a quarter million homes because it fills a real NEED in family life. Dr. Cadman's Radio Address, each week, and the inspiring sermons, editorials and stories should find a place in every Christian home.

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YOUTH'S COMPANION
Club Dept. C Boston, Mass.

The Best Trick of the Week—No. 7

The Handkerchief and the Egg

This trick requires a little preparation, and it is well worth it. A small handkerchief is used. It should preferably be made of silk. The magician pushes it into his left fist; when he opens his hand the handkerchief has disappeared, and an egg has taken its place!

The egg is merely a shell. To prepare the trick, take a pin and punch a hole in each end of the egg. Blow through one hole, and the contents of the egg will come out of the other

end. The egg should be blown into a cup. Enlarge the opening at one end of the egg so that it will admit the handkerchief.

Hold the empty egg in your left hand, with the handkerchief over it. Close your fist and with your right forefinger gently poke the handkerchief into your left hand and into the egg. Then open your hand and exhibit the egg.

The egg will last for a number of performances, if it is handled carefully.

Here and There

So many of your letters have said, "I'm interested in sports. I like to swim and play tennis and go horseback riding." Others say, "I belong to the basketball team, and we won the championship last year." And still others, "I don't do very much with sports myself, but I love to be out of doors, and I am always keen to read about sports." You see what a delightful time I can't help having with my mail.

After all these "sporting" letters came in, there was nothing for me to do but to get you some pictures about what is going on out of doors; and, since we have been talking about college so much these days, I turned to the colleges for sports. I hope you will like this page. And I hope you will write and tell me what sport you are interested in and what things you would like to know about it. Would you like to start a baseball team? Write me about how to do it and the rules and everything. What are training rules? How do you play soccer? What are some good tennis points? Write me about anything under the sun, and I will try to help you. Don't forget the stamped, self-addressed envelope if you want an answer.

Hazel Gray.

THE YOUTH'S COMPANION
8 Arlington Street, Boston

AT JUDSON

By Kathryn Wehmeier

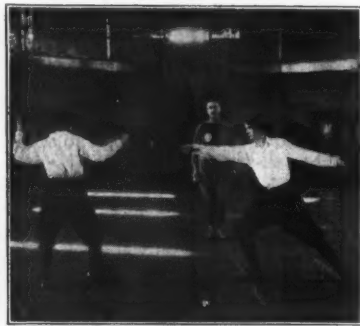
"HAVE a fudge sundae?"
"No, thanks; I'm keeping the health rules; can't eat between meals."
"Well, where are you going?"
"Going to get Jane; we're going on a gym walk."

This is just a little bit of conversation frequently overheard at Judson College, Marion, Alabama. Look out this front window over the campus, and you'll see a bunch of girls streaking down the sidewalk; a short distance behind them is another group, attempting, it would seem, to catch the first girls. They are walking an almost cir-



THE QUEEN AND HER COURT

The crowning event of the athletic contest at Judson College



AT MOUNT HOLYOKE

By Helen Davis

FENCING is a new sport at Mount Holyoke College. There are about twenty-five enthusiastic students who practice in the gymnasium every Tuesday under the direction of Mr. L. U. Lombardi, a riding and fencing master of the Italian School of Fencing. When they get a little more proficient they plan to have a tournament for the whole college to witness.

Of course this is a posed photograph. In any real bout the fencers must wear masks and gloves and plastrons. Doesn't it look like great sport?

cular stretch of sidewalk, nine times round which is two miles. Or they may take a walk out over the hills, carrying a little pedometer to register the distance. For every two miles, a girl gets a point for her class in the athletic contest. Likewise, she gets health

points for not eating between meals, for getting eight hours' sleep every night, and for taking an hour's exercise every day.

And you ought to have seen those soccer games! Talk about pep and hard playing—why, a football game couldn't begin to

compare! The winning teams received a certain number of points for their classes; the freshmen and juniors were the lucky ones. Also, for the first two games, points were given to the classes which could present their teams in the cutest, most original manner. At the junior-senior game the seniors received the prize, bringing their team on the field in a huge soccer ball on a wagon, from which the players burst forth.

The classes are now practicing outdoor basketball in full force, for the interclass basketball games are not far distant. These games are always hotly contested and full of pep. Points will be given for them also.

There are numerous other ways of winning points, such as folk dancing, taking gymnastic drills, winning tennis games, passing swimming tests, excelling in track events, and even correcting faulty posture.

If you would like to see something quite as comical as a first-rate side-show, watch some of the various stunts being performed in the gym. Here is a "human ball," a girl with hands and feet curiously intertwined and rolling round and round in a small circle. Here is a girl in the midst of a wand drill; with the aid of a long, slender stick she achieves all sorts of graceful positions. That girl over in the corner is doing a Highland fling to music. She poises one hand over her head while she does a somewhat complicated "fling step" with her feet—a pretty thing if well done, but rather grotesque if not. Just outside the gym is a girl with a bow and arrow, poised for a shot. The pose she has assumed is really very artistic if done with an attractive background.

The final wind-up of the contest will be field day in May. This most important event will consist of tennis finals and track and swimming races. The class which has the highest number of points per girl at the close of the contest receives a silver loving cup. This cup for the past two years has been won by the class of '26, the present senior class. If they win it again this year, it will be theirs for keeps. They are working hard for it, but the juniors are running them a close race, and the outcome is doubtful.

The advantage of an athletic contest of this nature is that every girl in school has a part in it, one way or another. The real purpose of athletics at Judson is the development of all, rather than of just a few.



AT SMITH

By Betty Newman

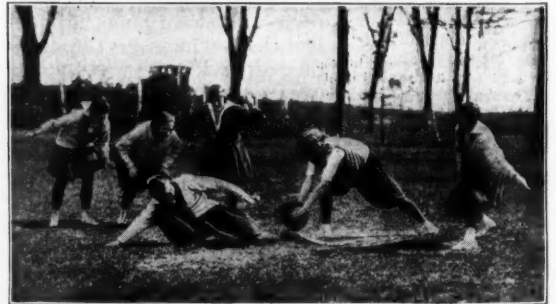
A LARGE part of the annual budget of the Smith College Athletic Association was spent this year in the purchase of a splendid pair of bowling alleys. Although they have been in use only a few weeks, almost the entire college uses them at some time during the week, and a good-sized crop of crack bowlers is being produced. There are classes in bowling and a system of signing up for hours in the afternoon and evening. At night, girls are allowed to bring their men visitors, so that strenuous contests in bowling have replaced the movies and tea-room tête-à-têtes for many couples. Here is a picture of an informal bowling contest.



SMITH COLLEGE SWIMMERS STARTING A RACE

AN INTERCOLLEGIATE TELEGRAPHIC MEET

THESE four Smith College swimmers are on their way, determined to defeat their invisible opponents at the University of Wisconsin and Iowa State University. Every event is run off separately at each of the three colleges, and the times sent over the wire. Back almost immediately come the opponents' times; they are compared and the winner is announced. This kind of meet avoids all the disadvantages of ordinary intercollegiate competition, with the excitement and thrill of making good for one's alma mater.



AT WELLESLEY

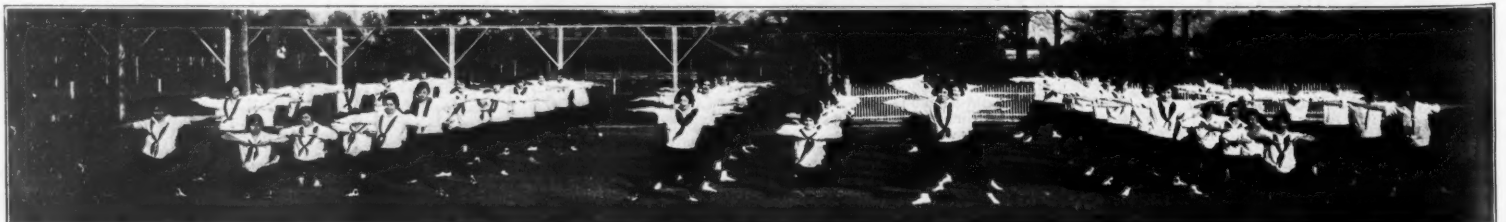
HERE is a picture of one of the major sports at Wellesley College. Baseball! It looks like a pretty exciting moment, doesn't it?

ABOUT THE COLLEGE CONTEST

YOUR college-contest letters are great. Although I am a college enthusiast myself, I never realized before that there were so many excellent reasons for wanting to go. I can hardly wait to know which letter the judges choose for the first prize! And I hope to be able to publish it in a few weeks.

H. G.

THE YOUTH'S COMPANION 8 Arlington Street, Boston



AN OUTDOOR GYM CLASS AT JUDSON



English as it is written by the Chinese merchants in Shanghai, one of the mileposts along the course of the Y. C. World Flyers.

Hop Off After These Prizes

HUNDREDS of Companion readers will win the Gold Prizes to be awarded in the unique Airplane Contest announced in the March 4 Youth's Companion. You might just as well be one of the fortunate winners. The work is easy—just recommending The Youth's Companion to new subscribers. Every order sends your plane 1000 miles, and there's a Cash Prize for every one who flies 3000 miles (3 new subs) or more.

How the Leaders Stood April 9 With 8 Weeks To Go

Pilot No.	Miles
447 Harley Jackson, Connecticut	24000
589 S. A. Yelland, Alberta	20000
500 Virginia Marvin, New York	18000
1108 James Horton, Jr., California	13000
173 Marcus F. C. Flattery, New York	9000
587 James Bockoven, Arizona	9000
1018 Mrs. Leanna Driftmier, Iowa	8000
296 Rhonda Elrod, North Carolina	7000
27 Mary L. & Charles Ulrich, Pennsylvania	7000
86 Lois Auten, New Jersey	7000
448 Paul Meredith, Michigan	7000
1365 Marjorie Kirk, Oklahoma	7000
20 B. A. Billings, Vermont	6000
387 John Sabine, Massachusetts	6000
738 Arthur Brown, Illinois	6000
183 Louise I. West, Massachusetts	6000
978 Eugene H. Guthrie, Pennsylvania	6000
1282 Chloe Deaton, Arkansas	6000
392 Arthur Wernuth, Illinois	5000
588 Fraser S. Knight, Florida	5000
296 Lester Carlton, Nebraska	5000
1083 Donald Stixrod, Minnesota	5000
927 Julia Van Der Velde, Alberta	5000
576 P. W. Allison, North Carolina	5000
102 Charles O. Bradstreet, Connecticut	5000
196 Allen Woolf, Nebraska	5000
506 Junior Minear, Illinois	5000
694 Blanche Wilson, Indiana	5000
643 James Buffington, Nebraska	4000
834 Emily Carpenter, Maine	4000
984 Mrs. W. A. Hoyt, Ohio	4000
124 Robert F. Johnston, Ohio	4000
512 Hermon King, Idaho	4000
333 Edwin Pope, Missouri	4000
1112 Ruth Doty, Tennessee	4000
883 William Rethorst, Iowa	4000
44 Iva L. Savery, Massachusetts	4000
161 Raymond W. Schuh, Massachusetts	4000
77 Edith Thomas, South Carolina	4000
503 Fraser Thompson, California	4000
476 Arthur Trueblood, Iowa	4000
783 Edward M. Vickers, Ohio	4000
1151 Roy Whitacre, Illinois	4000
735 John R. Burnett, New Hampshire	4000
321 Mildred Van Valkenburgh, Florida	4000
182 John E. Muesgrave, Illinois	4000
178 Sherwood Murray, Vermont	4000
1353 Joe Dougherty, Virginia	4000
1054 Elmer Santisteban, Indiana	4000
50 Rev. S. G. Hutton, Florida	4000

Watch next week for later news of the contest

Contest Closes June 1

This gives all contestants, including those who start now, ample time to win a big Gold Prize. And don't overlook the good news that these Gold Prizes are "extras"—in addition you receive a Premium for each individual subscription. The March 4 Youth's Companion will give you full particulars.

Mason Willis

Commander, Y. C. Flying Squadron

8 Arlington Street

Boston, Mass.

Fashions for the Young Girl



Hoyle Studio, Boston

Dear Suzanne: Isn't this dress a perfect peach? It is made of silk broadcloth, and it feels every bit as cool and crisp as it looks. The stripes on this one are rose and white, but you can get most any color with white. The green ones are lovely and would be ever so becoming to you.

put in the Youth's Companion last week? The girls in the club are crazy to make some money and buy a loom and start weaving a towel and some covers. Don't you think it would be fun? And they say that you can soon make enough money on the things you sell to pay for the loom. I'm simply dying to learn.

A Good Game

Dear Hazel Grey: This evening as I was reading my Youth's Companion (especially your page) I saw how many original and enjoyable games there were. I hope you intend to publish more of them, because I have one which I am sure would interest every girl who reads your page. I have found it very interesting, and I hope you will like it as much as I do. I am copying it. It is "A Romance from Shakespeare," and every question asked is to be answered by the name of one of Shakespeare's plays.

MARTHA SEBASTIAN

A ROMANCE FROM SHAKESPEARE

1. Who were the lovers?
Ans. Romeo and Juliet.
2. What was their courtship like?
Ans. Midsummer Night's Dream.
3. What was her answer to his proposal?
Ans. As You Like It.
4. Of whom did Romeo buy the ring?
Ans. The Merchant of Venice.
5. At what time of the month were they married?
Ans. Twelfth Night.
6. Who were the ushers?
Ans. Two Gentlemen of Verona.
7. Who were the chief attendants?
Ans. Antony and Cleopatra.
8. Who gave the reception?
Ans. The Merry Wives of Windsor.
9. In what kind of place did they live?
Ans. Hamlet.
10. What caused their first quarrel?
Ans. Much Ado About Nothing.
11. What was her disposition like?
Ans. The Tempest.

Order books from me. Add ten cents a book for postage.

Hazel Grey

THE YOUTH'S COMPANION

The collar and cuffs are white, and the tie is made of the same material as the dress. The belt fastens in front with a little buckle right under the tie. Aren't the pockets nice? You can see only one, of course, in this picture, but there is another on the other side.

I have one of those new, rather loud but ever so attractive "hankies" in the pocket you can see. Hazel Grey and I shopped at Filene's for the dress. It costs \$16.50. The sizes are twelve, fourteen, sixteen.

And the tennis racket—we shopped there for that, too, and I bought this one for \$6.50. It is a good one, and I'm going to have a great time with it out at the country club this summer. Why don't you get one, and I'll teach you how to play? You really ought to learn, you know. But I suppose you are so busy making your own clothes that you haven't time for anything else except studies. The racket comes light, medium, heavy.

I thought your dress was ever so attractive last week, and you are smart to make it. Hazel Grey tells me that you are making another now that she is going to put in The Youth's Companion next week. Good for you!

By the way, Suzanne, can't you help me out on a name for my club?

Didn't you like that article on weaving that Hazel Grey

Betty

ABOUT BOOKS

Dear Suzanne: I have found just the book for you to give Bob for graduation. All about canoeing—how to choose a canoe, how to paddle it safely, how to equip it with personality, how to care for it, and how to "canoe-sail." Doesn't it sound like Bob? It is called "The Boys' Book of Canoeing," by Elon Jessup, and it is put out by E. P. Dutton & Co., New York City. It costs two dollars. It has some good drawings in it too, and a few real pictures. Bob will bless you.

Dear Betty: I have an idea for your club. It is to do magic. I mean the idea is that you should get a book I have been reading and begin to practice magic. The book is called "Magic in the Making," by John Mulholland and Milton M. Smith. Charles Scribner's Sons publish it, and it costs one dollar and a half. Twenty-two magical tricks are explained very carefully, and there are good diagrams and drawings. Why don't you and your club have an "evening of magic" and raise some money for something?

Suzanne

8 Arlington Street, Boston

A Letter that Speaks Volumes

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THE YOUTH'S COMPANION

8 Arlington Street

Boston

THE CHILDREN'S PAGE



THE WEE SMALL SPRITE

By Hugh Fitz

Down in the garden
Lives a wee small sprite
Who sings a gay and
happy song
Almost every night.

I've never really seen him,
But his happy little song
Has lulled me into sleepiness
For ever so long.

It's always in the night time
He sings and sings and sings.
I think my very happy dreams
Are gifts that he brings.

I wish I once could see him
When I'm really wide-awake
And make a little bow of thanks
For his singing's sake.

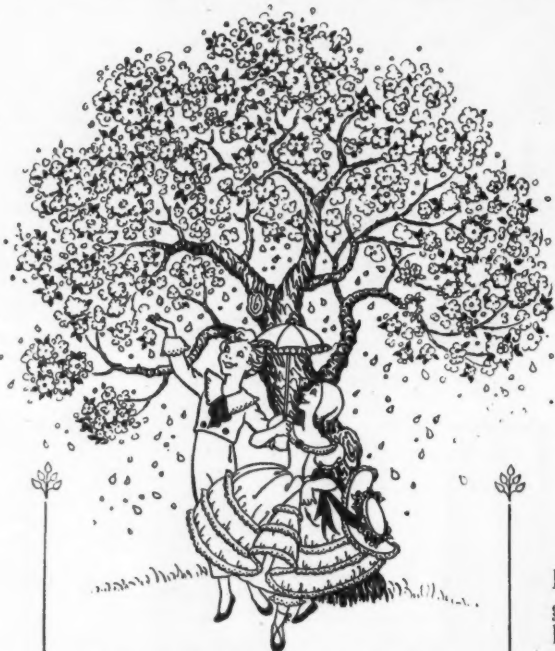
WHEN LITTLE BEAR WISHED ABOUT OLD GANDER

By Frances Margaret Fox

OLD Wild Gander lived near the Three Bears' home. His wings were hurt, so he could never again fly far away. A big white wild goose loved Old Gander. She said: "I will stay with you. We will build our nest beside the pond."

They did. Little Bear was sorry. When he went near the pond Old Gander used to say: "Honk—honk!"

Then he would put out his long neck in a straight line and chase Little Bear. He used to say "Hiss—hiss—hiss!" at him.



APPLE BLOSSOM TIME

By Russell Gordon Carter

Maytime flakes are flying—
Apple-blossom snow;
The air is sweet
With petals fleet
Everywhere you go.

Oh, the joy of living
When the sun is warm
And I and you
Can wander through
An apple-blossom storm!



MAY

By Pringle Barret

Flowers and bowers
And hours of showers
In May—
And gay little girls
With corkscrew curls
At play
And laughter as gay
As a dew-dressed day
In May!

One day Old Gander chased Little Bear all the way to the gate that led to the Three Bears' house. Little Bear sat on the door-step to think.

Next day Old Gander chased Little Bear home again.

"I wish I could scare Old Gander!" Little Bear said as he sat on the door-step to think.

Mother Bear laughed. She was picking berries by the gate. Old Gander then said "Hiss—hiss—hiss!" at her.

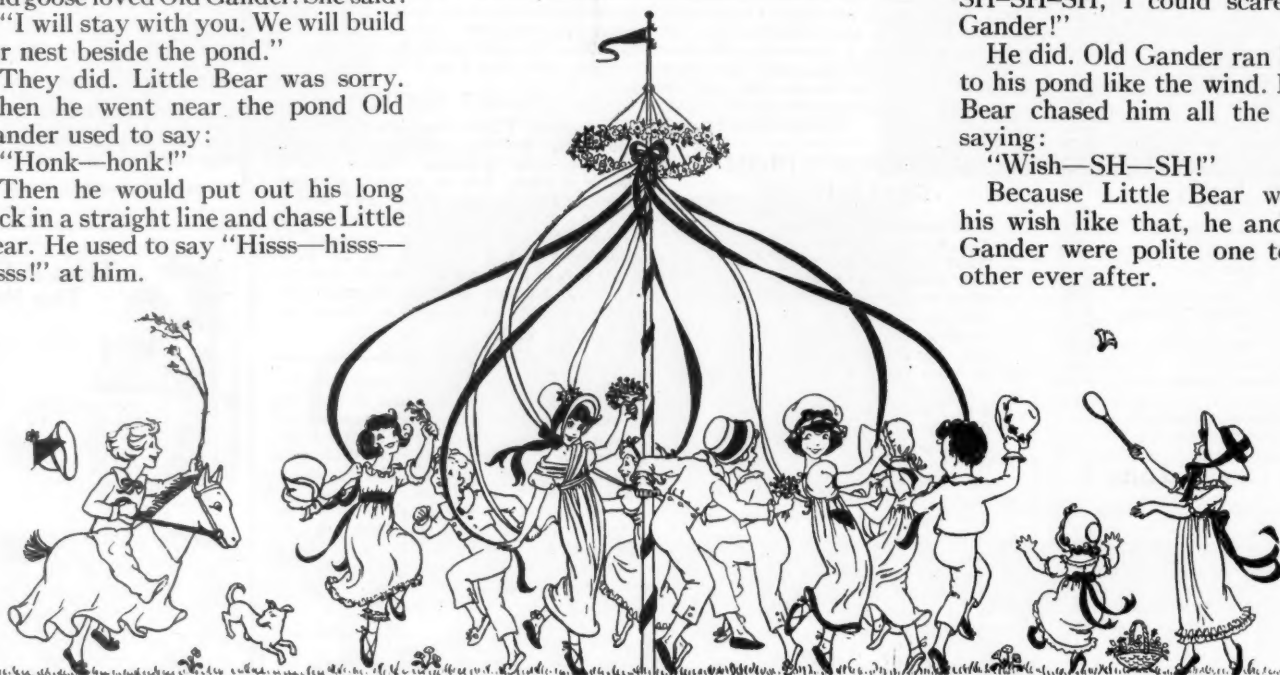
Up jumped Little Bear. He ran straight after Old Gander and said:

"I wish—SH—SH—SH, wish—SH—SH—SH, I could scare Old Gander!"

He did. Old Gander ran home to his pond like the wind. Little Bear chased him all the way, saying:

"Wish—SH—SH!"

Because Little Bear wished his wish like that, he and Old Gander were polite one to the other ever after.



Drawings by Wynna Wright

FREE! A MONSTROUS MENAGERIE

The ferocious tiger, the kangaroo, leopard, mouse, camel, ant-eater, snake, porcupine, swan, giraffe, flying horse, screaming eagle, wild elephant, etc. This grotesque packet of birds, beasts and reptiles FREE to approval applicants enclosing 5c postage! Big illustrated lists also free—write today!

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1000 mixed stamps 25c, 1000 hinges 10c, album to hold 2000 stamps 50c. All different 300 stamps 20c, 500 35c, 1000 90c, 2000 \$3.75, 3000 \$10.00. **Michael, 5353 Calumet, Chicago.**

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Color: carmine. Franciscan convent at Assisi



Emerald-green Belgian flood stamp



Color: violet. Chapel and monastery of St. Damian

ST. FRANCIS OF ASSISI

It is an elaborate pictorial series which Italy has issued to commemorate the passing of seven centuries since St. Francis of Assisi died, on October 3, 1226, after a life in which through his preaching among the poor he so closely imitated Christ that history and the religious world have come to recognize him as one of the world's foremost gospel leaders of all time.

The stamps are of large size, horizontally, in order that the views may be shown to advantage, and the designs are by noted Italian artists. The vision of Jerusalem with the three crosses is depicted on the 20-centesimo, olive-green. The chapel and monastery of St. Damian, near Assisi, appear on the 40-centesimo, violet. The church and convent of the Franciscans, at Assisi, are pictured on the 60-centesimo, carmine. Perhaps the most striking scene is to be found on the 1 lira, 25-centesimo—representing the death of St. Francis. On the highest value, 5 lire, brown, is a portrait of this illustrious preacher, after a panel by Luca della Robbia, with the Church of Sta. Maria degli Angeli in the background.

MOSLEM COMMEMORATIVES

ABOUT the time when Ibn Saud proclaimed himself king of Hejaz, in January, with the consent of the British, the philatelic world began to receive hints of more postage stamps significant of this Wahabi leader's march to power in the Moslem world.

When Ibn Saud and his Wahabi entered Hejaz's capital they confiscated stocks of Hejaz railway stamps, with values of 10, 50, 100, 500 and 1000 piastres, the lowest two denominations being respectively violet and blue and the other three brick in color.

The overprint placed on the set for Jeddah is translated to read "In Memory of

as a "semi-postal" adhesive along the lines recently described in The Companion. In its new color this stamp bears a surcharge—an additional value, 30 centimes, and the French and Flemish equivalents of the English word "floods": "Inondations" and "Watersnood." This overprint, which is in red, is significant of the purpose of the stamp—to raise funds for the relief of victims of the floods which some weeks ago swept over Belgium and other countries in continental Europe. The stamp sells of course for 60 centimes but prepays postage only to the amount of the face value, 30 centimes. One million copies were issued.

Subsequently two other Belgian "flood" stamps appeared, each one franc in value but selling for two francs apiece. The design is uniform—Van Dyck's famous picture of St. Martin dividing his cloak with a beggar—but one stamp is solid color and the other has an etched background. Half a million copies of each were printed, and these and the 30 centimes will be postally valid the rest of the year.

TACNA-ARICA

PLEBISCITE stamps once more come into existence as significant of a development in history. These "will of the people" adhesives were not uncommon during 1920 and 1921 in Europe, where, during the period of reconstruction immediately following the World War turmoil, there were territorial disputes, and where, under the guidance of the Inter-Allied Commission and other international tribunals, certain populations voted as to their preferences of motherlands. During those two years approximately 370 plebiscite adhesives were issued. This kind of stamp then disappeared in so far as its postal use was concerned. The Tacna-Arica controversy between Chile and Peru has revived it.

There are four of these new plebiscite offerings—all issued by Peru. One is Peru's

Brown. Portrait of St. Francis by Della Robbia

Olive-green. Vision of Jerusalem, with three crosses (left)

The death of St. Francis (right)



Olive-green. Vision of Jerusalem, with three crosses (left)

The death of St. Francis (right)



Jeddah—1344—Post of Nejd." Ibn Saud was sultan of Nejd when he began his onslaught against Ali and the latter's predecessor, Hussein, Ali's father, during 1924. The surcharge which appears on the series for Medina means "Post of Nejd—1344—In Memory of Medina the Illustrious." The overprintings are in Arabic.

Ibn Saud had not long been Hejaz's new ruler before the commemoratives were followed by two sets of regular stamps, in Arabesque designs. Values and colors of the first series are ¼ piastre, orange; ½ piastre, green; 1 piastre, red; 2 piastres, purple; 3 piastres, blue-gray; 5 piastres, brown. Of the second they are ¼ piastre, violet; ½ piastre, gray; 1 piastre, blue; 2 piastres, green; 3 piastres, red; 5 piastres, red-brown. In addition, postage dues appeared—½ piastre, rose; 2 piastres, orange, and 6 piastres, brown.

FLOOD STAMPS

BELGIUM's current 30-centime stamp is vermilion in color. It has been reissued in emerald green—but this time as a so-called charity label, which must be classed

The plebiscite between Peru and Chile has now been postponed pending an attempt at settlement. If no plebiscite is ever held, the issue will have a most unusual character.

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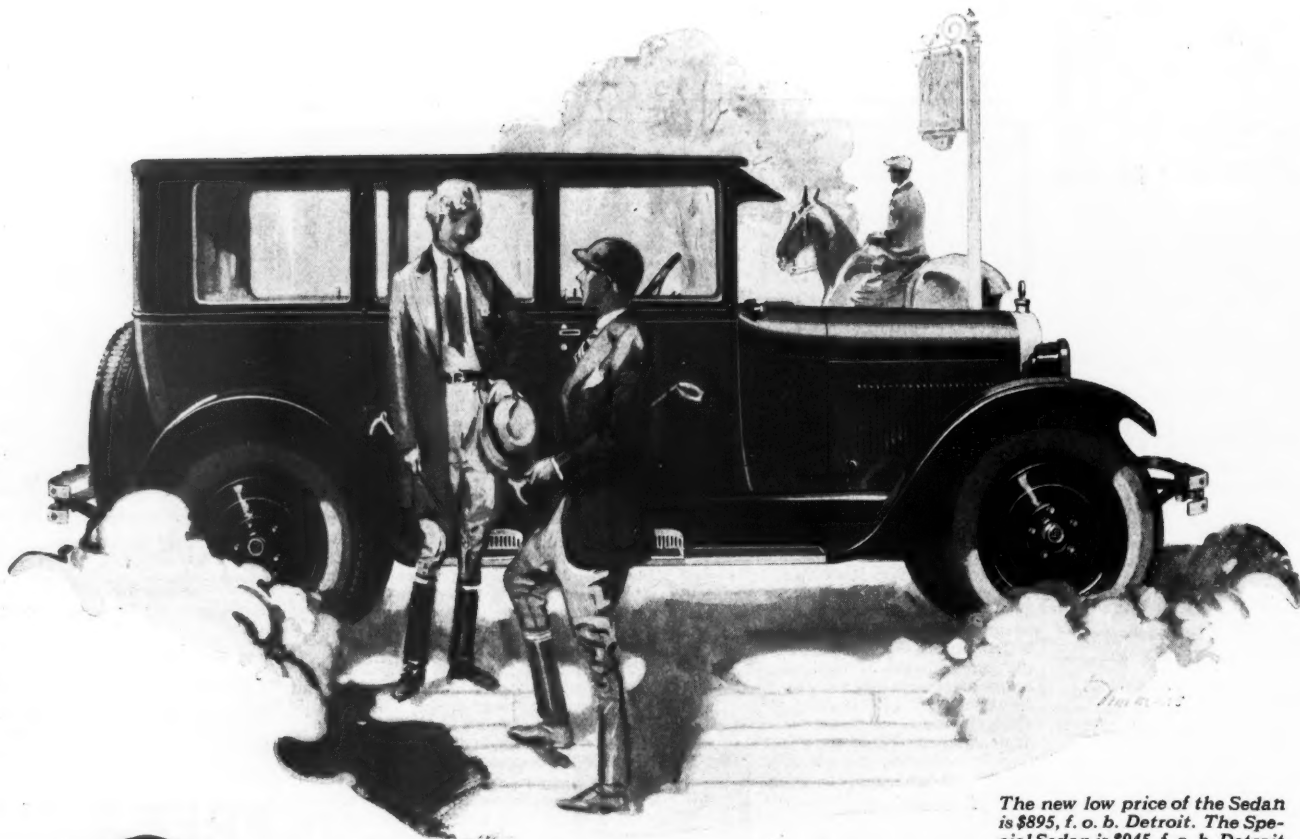
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